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Bird News

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Devoted to the Interests of the Bird Fancier

Volume 1.

JANUARY-FEBRUARY, 1909

Number 1

OUTDOOR AVIARIES

The practice of keeping live birds in confinement is world-wide and its origin is coeval with man. One of the earliest edicts, uttered in the grey dawn of creation's morning, defines the relationship of man to birds—for God said—"have dominion over the fowls of the air." One can surmise, our first parents wandering along the river banks of the Garden of Eden, listening to the voices of the little people of the trees, enjoying the rapturous song warbled forth from hearts atuned to the great freshness of life, its beauty and its harmony—an unconscious tribute to that masterpiece which won even from its great designer the verdict, behold "it was very good." When Solomon traded with the spice merchants and all the Kings of Arabia, when Sheba's queen stood silent, overawed by the wondrous profusion of gold and silver and precious stones, as her ears drank in the wisdom of his utterances, she heard also the voices of many fowls; the haughty challenge of the imperial peacock, the winsome mournfulness of the dove, or the seductive warblings of the bulbul—for Solomon kept birds. If so, with the wisdom accredited to him, can it be deemed a foolish thing if we reflect a moiety of his wisdom and do likewise? It is a strange fact, perhaps indeed an uncomplimentary one, that Americans have less of the spirit of bird love than any other nationality. Aviculture is practically unknown, the interest in the science is most limited; there is really nothing

of that community interest and information which characterizes other great centers of civilization.

In taking up the practical study of aviculture, there is much to be learned, much to be done, many difficulties to be overcome and much patience to be exercised. Birds are simply living demonstrations of natural laws; the more faithfully we can recognize and apply those laws, in just such measure shall our avicultural efforts bring forth beneficial results.

The home of the bird under domestication is technically termed an aviary; and while custom has somewhat departed from this definition, it is none the less true that the "home" is an aviary, whether it be the grim cage of the costermonger's linnet or the palatial enclosures of the favorites of a king or a baron.

There are certain fundamental principles absolutely essential to successful bird keeping—principles which must be observed, be it a cage home or an artistic residence. The principles are freedom from drafts, damp, bad air and overcrowding. Further, protection from sun heat, from all causes of fright, from incursions of vermin, red mites, mice and cats. These shall all be referred to in later detail.

An outside aviary, as we desire to use the term, must not be confounded with a bird house or a bird room.

It is an enclosure consisting of a covered section and an uncovered section or flight. This aviary will be modified in its plan according to the place where it is located; it may be

a detached structure, or it may be a Can-to, fitted into some already existing corner. Be it what it may—with the fundamental principles already observed; with average care bestowed upon the species of birds congregated and attention given to their habits, food and other demands; almost any structure or any arrangement will have a large measure of success. The site is important; possibly in this climate a north or northwest frontage or frontage and ends would suit most localities. A detached building would have sun allround, and would here need only special protection according to the direction of prevailing winds and rain. It is well to note in passing that birds dislike wind, and should be protected from it. Above all, don't place your seed hoppers or feed boxes in the wind, for it is as risky and unpleasant for a bird to eat its spray-millet or German rape, in a wind current, as it is for some bald headed epicure to eat blue points, or cracked crab at a window ledge or ventilator shaft.

The shed or inclosed portion of the aviary wants to be light, roomy, well-ventilated and free from drafts. Material, wood, brick or re-inforced concrete.

The foundations should be well sunk into the ground and so constructed that rats, mice, or gophers, cannot gain entrance. If elevated above ground the piers, or posts, should be capped with wire netting, or other metallic cowls, which would prevent vermin climbing up the supports. The elevated house has many advantages, which render it a desirable class of structure. The floor should be planed boards, grooved and tongued, or else cement finished, and should always have a slight incline in order to run off water when wasted. The floor independent of its composition should always be liber-

ally strewn with dry sea sand (never red or yellow inland sand.) This sand should, of course, be renewed when necessary for sanitary purposes.

Walls—or sides of the enclosure, even when of wood, should be white washed, smooth finished with no nooks or dark corners to retain dirt or hide vermin.

The ceiling should be finished as the walls, and with same precautions as to vermin.

The roof—Slates, tiles, or shingles, as may be possible; but must also be rendered vermin proof; must have no space between ceiling and roof finish. On no account should glass enter into the roof; a green house is good for plants, but very bad for birds, causing sweating, feather dropping, and even apoplexy.

Glazed windows, movable, with wire screens on the inside should be placed in the shed; so that abundance of light, sun and air can be admitted at the same time be under the control of the attendant.

Entrance to shed should be by a door in the rear or side. A most excellent plan for convenience or study is to have a verandah, or closed corridor at the back of the shed, here observation can be made without disturbing the birds. This corridor can be formed into a store-room to contain seeds, cages and other bird-room "fixins". The door must work upon a spring to prevent being left open; and it must have a bar, or latch on the outside. In addition, inside of the door may be a wire screen, which will serve many useful purposes. The front of the shed, facing the open flight, maybe left entirely open; provided the shed is deep enough to prevent rain from being driven in by the wind. If this is not possible then an overhanging eave, broad enough, must protrude from the edge of the

roof. This will act as a rain and wind break. A better way, both as a weather protection, and in case you desire to shut in certain specimens, is to have the front, provided with a door cut into upper and lower sections, and with or without additional wire screens. In cold, or stormy weather, the lower half of the door can be closed; shutting off all ground currents from the birds roosting within.

It is a good plan not to keep seed hoppers, or water vessels inside the bird shed; but specially arranged in the outside flight.

The perching accommodations in the shed will somewhat depend upon the class of birds you keep. It is not desirable to have non-perching birds roost upon the ground, underneath perchers; their plumage soon becomes most unsightly.

Nothing is better for perches than boughs of trees, coarse weeds, or reeds, these can be fastened to the walls of the shed, but not in touch with the floor, lest some intrusive mouse, from the outside, may like Jack in the bean stalk, climb up the pole and cause a panic, if not a tragedy, amongst the temorous inmates.

The flight—i. e. the outside section of the aviary is most important. The frame, built of wood, must be firm and strong. The flight is to be covered with wire netting, the one-half inch mesh being found best, even for large birds, for this size will prevent the entrance of the troublesome English sparrow, a veritable nuisance to the owner, also to the inmates of large meshed aviaries. The one-half inch mesh will be found too large for many of the smaller foreign finches, in such case the one-fourth inch galvanized wire mesh is the only standard available.

The netting must be put on quite tight and over the frame, not inside.

One or more doors for entrance of attendant should be placed at most convenient place in the frame. All doors should be provided with spring locks and bars. The frame work painted brown, cream, or white; several coats of either color; with a little varnish added, is effective for many months. The flight roof is better not covered in, except by the over-hanging eave, already noted; or as a substitute a strip of waterproof roofing, oiled canvas, or tarpaulin, which should extend about a yard from, and flush with the roof, or eave of the shed.

The purpose of such provision is necessary because many birds will not roost inside a shed or building, but will readily do so under such an outside cover, especially if branches are placed underneath. The roof of the flight, should have a wire screen, stretched over its entire area. This is a wide meshed netting, fastened to the sides and ends of the flight and rising about six inches above the roof netting, this prevents cats parading along the roof bars, or sitting there upon for hours, awaiting an opportunity to drag some scared bird through the mesh. Many a bird has disappeared, and the mystery has been unsolved—until the family, or neighbors' cat was caught, fishing, with one paw stuck through the wire roof.. A similar screen should protect the sides of the flight, and run to the height of 18 or 24 inches from the ground; this keeps off dogs, cats, or other visitors, which are apt to nab birds clinging to the wire sides of the flight, a common habit, especially with fledglings. The floor of the flight may have a portion in cement finish but must have its larger area ordinary soil. Special gravel patches may be arranged. The dry soil furnishes dust bath accommodations. Underneath the surface, say

six inches, may be laid a layer of galvanized square mesh wire, or iron-lath sheeting, covering the floor area and rising at the sides if possible; this acts as vermin-proof barrier.

Perching accommodations must be provided, branches of varied sizes and kinds form the best, but these must not be so numerous as to leave no room for flying. The branches must not be so placed as to act as ladders for mice, nor should they be placed against the sides so that perching birds could be reached by cats. Clumps of weeds, fan palm leaves, or branches, must be placed underneath the covered in part of the flight to accommodate such birds as prefer to roost outside of shed. Small clumps of weeds can also be so arranged, to form nesting sites, according to the variety of birds kept.

Imitate nature as nearly as possible and your results will be more successful. Shrubs, vines, geraniums, wallflowers, privet, sweet fennel, asparagus and many other green things may be grown, if protected, inside of aviary. Birds, if provided with green food, rarely are so aggressive as to destroy coarse quick growing shrubs. A section of the floor can be seeded in grass, or may be planted with already growing sods of grass. Millet rape, grass, seeds, oats, wheat, wild mustard, should be forced, that is, planted, then covered with wet sackings until germination is advanced. Underneath the wet sack all sorts of "crawly things" accumulate, which to soft-bills and feeding parents, or fledglings, are veritable French dinners. These salad beds must, on no account be permitted to become mouldy. A few bunches of decaying weeds, or damp straw will also afford animal life, and are to be commended. When your young birds, or newly caught wild birds, are feeding, you will find they enjoy seeds, made juicy

by being placed overnight on the moist ground. Shop dry seeds, are veritable hard-tack, while "soft-snaps" are appreciated even by the old veterans—"hard upon seed."

Vines, hops, or passion-flowers may be grown outside flight to provide shade, but be sure to guard the stem with wire netting so as to prevent mice. Privet bushes and flowering plants may be planted close alongside the flight. They attract insects which afford tid-bits to the inmates.

If space permits it is excellent to have a relief flight, already vegetated, into which the birds can be admitted, giving the other flight time to recuperate. Nesting birds and fledglings would have to be considered in changing the base. What are the proper dimensions, depend upon the space, the site, the species and the number of birds. For convenience sake, your aviaries, both shed and flights, should be at least seven to ten feet in height. Birds show off to better advantage when seen overhead; they are less timid when above you. Never overcrowd your space; floor space is made the gauge. For small birds, tits, waxbills, sociable finches, one bird to each nine inches square, is a good average. For larger birds, such as Canaries and finches, one foot at least should be provided. Long roomy flights please the birds better than square ones; they permit an opportunity for distance flying. Remember, also, soft bills, by their habits and food, foul a flight much worse than do hard-bills, or pure seed eaters.

Food dishes, are best placed in covered hopper, or in seed boxes of any type and should be always swung from the cross-bars, too far away for a mouse to jump into them and too inaccessible to be reached from the ground. Theory says; "provide drinking water fountains;" birds de-

light to take and will drink out of their bath tubs, no matter what you do, keep these clean and fresh, and no bad effects will follow. Large shallow one and one-half-inch in depth, glazed earthenware pans make the best water baths. Food and special treatment at breeding and moulting seasons must be considered in another bulletin.

Enter your aviary quietly, salute the inmates with a chirp, or a whistle, move about quietly, do no stunts, and your birds will soon learn to know you, welcome your presence and repay in a thousandfold all the care and attention you have bestowed upon them. The little people of the sunshine, humbly claim a kinship, with him, who is of more value than many sparrows, deny it not, and you will in no wise lose your reward.

BIRD MIGRATION

By the courtesy of the Geographical Society of California we are permitted to quote from bulletin of the Royal Geographical Society of London.

"Interesting experiments with a view of throwing light on bird migration have lately been carried out by the authorities at the 'Vogelwarte' at Rossitten, on the Kurische Nehrung, in East Prussia. Young half-fledged storks have for some time been marked by means of an aluminium foot-ring, the number so treated reached a total of some 1800 (*Deutsches Kolonialblatt*, September 15, 1908). Two such marked birds have been reported from widely separated parts of Africa, the first, which commenced its southward flight in August, 1906, having been captured by natives on northern shore of Lake Fittri, in Wadai, October of same year. The ringed foot came into the possession of a French officer, Lieut. Loisy, by whom it was forwarded to Rossitten.

The second bird has accomplished a far longer flight. Its ring had been attached in July, 1907, near Gross-Mollen, in Pomerania, and it started south on the 25th of the following month. On December 9, 1907, it was shot by natives near Fort Jameson, in Rhodesia, thus affording a proof that these birds cross the equator into southern latitudes while on their southward flight. Other birds have also been marked, and some of these have likewise been reported—one from Tunis. It is hoped that when the fact of these experiments becomes more widely known, more of the birds may be heard of, and the director of the Vogelwart makes an appeal to all who may become possessed of any marked birds to send them intact to the address given on the ring, deprecating at the same time any systematic war on the birds, with a view to obtaining marked specimens.

AN EXPERIMENT UNDER NEW CONDITIONS

Rev. Father H. Eummelin says of the reclaimed El Centro, Imperial Valley: "The valley is rapidly being transformed into an agricultural area. The everlasting irrigation and new vegetable life, produces endless seeds and bugs. The valley itself is surrounded by bleak sand hills, which keep the birds out. I propose to enclose a cultivated tract; stock it with native birds, feed and care for them until they rear a number of young, then liberate old and young, caring, however, for them until they become established."

Many individual birds are hysterical and will start a panic in a moment, especially at night, with serious if not fatal injuries to their companions. Separate such.

BIRD NEWS

 FREDERICK W. D'EVELYN, EDITOR

 Send all Manuscript to this Department

In introducing Bird News to the bird lovers of America, we offer it as a companion, a friend and a guide to aid, to educate and to encourage.

We anticipate not only the hearty support, but also the active co-operation of all—and they are legion—who not alone treasure "their pets," but are desirous of affording them more intelligent and rational treatment, and thus better to appreciate their worth, beauty and utility.

It is not an unmanly thing to seek a wider fraternity in that kinship of nature, which helps to make life — worth while.

 CHIRPS

Black Swans were bred in England last season.

Varied sized branches cut to fit the cage make best perches for all finches.

Don't put paper in the bottom of the bird's cage. Birds don't enjoy it, even if it is the "funny page." Cover the floor liberally with dry sea sand, sprinkle a little gravel in one corner. Your cage will be less offensive-looking and the bird will feel at home.

At the recent Jubilee and Crystal Palace Show, London, England, almost 3000 birds were on exhibition. A rare specimen of the Painted Finch—*Emblema picta*—of Australia, was on exhibition. We shall have something to say about this beautiful bird in our next.

Don't forget, we want to get in touch with you. Let us hear about your birds, and what you know about them.

The Western Meadow Lark is still on the protected list, thanks to the intelligence and common sense of our legislative, nature students.

Our next issue will contain an excellent article upon, "Rearing Wild Fowl on a Southern California Ranch," by the late H. L. Sefton.

Don't hang the cage outside without putting a sunshade over the top. Birds seek the shelter of branches and other cover when the sun is on high.

As we go to print the future of a Bird Arbor Day Bill for the schools of California, is in the hands of Governor Gillett. We anticipate his hearty approval.

Luther Burbank celebrates his birthday, March 7th. What more graceful and fitting monument to the Wizard of California, than accepting March 7th as Bird and Arbor Day?

Albinos were much in evidence at the Crystal Palace Show of Cage Birds. White blackbirds, white linnets—but the rarest of all was a white canary. The big London dailies wrote much "copy" concerning it.

California has again clothed herself in her "glorious climate." Don't make this an excuse for propping up the open window with the bird's cage. Many a good songster has been "chilled" to death by this careless custom.

THE CANARY

PRACTICAL NOTES ON GENERAL MANAGEMENT AND BREEDING.

There is perhaps no bird so universally adopted as a home pet as the canary. Few indeed, even though the passing years have tinged the hair with white, and the furrows of time have grooved the forehead, but can recall some period in their history when the little yellow bird was a factor for their pleasure and their interest. Very nearly half a million canaries are imported annually, and distributed throughout our "own United States." It is not at all likely that each owner of a canary is either a fancier or an expert. An admirer of birds is not necessarily the best friend of a bird, for in bird life, like all other kinds of experience, evil is as often due to lack of thought as it is to ignorance or indifference. The purpose of this series of articles upon the canary is to help the beginner, and perhaps indirectly aid even in a slight degree the mature birdman who "knows it all."

An old ornithologist, Gesner, who wrote, in the year 1585, refers to the canary as being a common house bird. What variety or type it was we cannot at present determine.

The legend that Italy was the birthplace of the canary seems more or less generally accepted. The Canary islands, it is said, became populated by these birds through the foundering of a ship bound for Leghorn; a number of birds were on board, and on being liberated they made their way to the islands where, finding the climate and conditions favorable, they became acclimatized. Wild canaries are still to be found in many of the islands of the Atlantic ocean, and on the mainland of South

Africa. Indeed few countries but claim a wild canary. The mere fact of being a small bird, finch-like in type, somewhat yellow in plumage, seems all that is necessary to obtain, locally at least, the title "wild canary."

The original wild canary, the accepted prototype, is not yellow, but green, rather squat in form, and not by any means a show bird; possessing, however, a soft and melodious song, having much of the tone so desired in the modern "roller." It is well known that the pigeon fancier can breed almost to a feather any type or variation he desires. The canary fancier claims, and justifiably so, that he can with his birds do likewise. The varieties of canaries are numerous, well defined, with fully established and accepted points which demand expert knowledge to appreciate and value.

Great Britain and Europe may be considered as the great centers for fancy canaries. America has not yet, to any considerable extent, taken up the fancy, so that to the great majority of our people, the show canary is a *rara avis*. Many causes are responsible for this, and amongst these none more so than the lack of small homes—the little house, which to a tenant was a castle, where he was free to exercise the best of his desires and possess his pets, none daring to make him afraid. Further, the tenement house, the "no children" landlord, or the boarding mistress with the exacting "not allowed" have proved domestic evils in the path of the bird fancier. Time, improved social conditions and general education will soon give to the American fancier opportunity to raise birds, and ere long he will be a successful rival of his old world brother. The Avicultural society desires to aid the bird lover of America and, soliciting his co-operation, promises better

times in the not far distant future.

We shall first consider the canary, as a cage bird, rather than as an inhabitant of an aviary. A cage bird naturally suggests a cage. What is the best cage for a canary? It is an unpleasant fact that the cage most popular with the bird keeper, viz., the round bell-shaped, painted cage, is the worst possible, but "it fits nicely between the window curtains," is the response made when the kind of cage is questioned. This compels the deduction that the bird to such a person is at best an ornament—that is, something to harmonize with the furniture. We contend the canary is worthy of a better estimate and we shall see that he gets it.

(To be continued.)

The British Ornithological Union has at last passed a much wanted rule to expel any member guilty of taking or receiving eggs of the rarer species of birds breeding in the United Kingdom. We would like the A. O. U. to do likewise.

Don't hang your bird away up near the ceiling in rooms where gas or lamps are burned. Put your hand into the heated air stratum and then realize what torture it meant for the bird.

When placing nesting material in your aviary or cages, don't have pieces of string or thread, else you may find next morning a dead bird, suspended by neck or foot. Cut all strings short.

Don't put a newly bought bird into your bird room or aviary; keep it under observation; it may be timid, sick, or very possibly dirty. If so, wash it. We will tell you how to do that some other time.

A NATURE STUDENT OF THE LONG AGO

Recently a burial chamber in Egypt was opened by explorers. The electric lamp flashed across eyes that had fallen into the long slumber—three thousand years ago. Somewhere about the year 1470 B. C., a child, Yuua, a Syrian, was born. In the course of time he married an Egyptian woman, Thuau, and they had a daughter Thiy. It was the tomb of Yuua, and his dead queen Thuau that was opened. Thiy, the daughter, gave birth "to the first individual in human history"—so-called, because of all the mighty Pharaohs he is the one most revealed, known as Akhnaton; he founded a religion to the Sun.

On the walls of this tomb is recorded the orthodoxy of his religion. Amidst the pomp and majesty of Egypt, he returned to nature and told his people of "a God"—who listens 'when the chick crieth in the egg shell,' and gives him life, delighted that he should chirp with all his might and run about upon his two legs, when he hath come forth therefrom'; a God who finds pleasure in causing the birds to flutter in their marshes and the sheep to dance upon their feet. The mighty Egyptian saw the Creator in "the works of his hands" and worshipped nature in nature's God—touches such as this makes all the world kin.

OUR FLEDGLINGS

B. N. will give each issue three money prizes for best short bird story; original; not to exceed 150 words; written by children under 16 years of age.

Don't overtask your breeding birds. Better get quality than quantity. Three nests in a season is a good average.

Bird News

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Volume 1.

MARCH-APRIL, 1901

Number 2

REARING WILD FOWL ON A SOUTHERN CALIFORNIA RANCH

(H. L. Sefton.)

In the Jamacha (pronounced Ham-a-shaw) Valley, about twenty miles east of San Diego, California, is the Monta Vista Ranch, of nearly 1,000 acres, a most beautiful spot with its miles of fine drives, some bordered with the stately Palm, others cool in the shade of acacias, grevilleas, or the more graceful pepper tree with its bright red berries. The valley, not a large one, is entirely surrounded with mountains, some mere foothills, others towering skyward, one above another. The river, outlined with willows, separates valley from mountain on the south. All about are great fields, some of grain, others where horses and cattle graze, and still others green with alfalfa, over which the bloom throws a purple hue. The sun shines bright, the sky is blue and the air full of the sound of singing birds, and the sweet odor from hundreds of orange and lemon trees—a typical Southern California ranch, where one can hear the soft-voiced dove calling to its mate, the whi-r-r of coveys of quail, there are many, as no shooting is allowed on the place, the yelp of the old hound as he runs a jack rabbit across a field, see the descendants of Mollie Cottontail scurrying across one's path, or a flight of buck seeking fresh water on their journey overland, or if one cares for more adventure, all one needs to do is to

climb up among the rocks, on the side of some hill or mountain, and the whi-r-r has a metallic, never-to-be-forgotten sound, and it were well with you if your gun is handy and your aim true, for the rattlers are big in this neighborhood. Then too, there are wild cats, not seeking you, but mean when they are cornered. We killed an old grandfather a few weeks ago that weighed 56 pounds—he made a nasty fight. Further up among the mountains are deer, and just around the base of old San Miguel lies the Sweetwater Lake, where one can pass an enjoyable hour with the bass and perch.

The owner of this ranch, Mr. J. W. Sefton, loved birds, at his town house he has an aviary of over six hundred live birds from all parts of the world—some day I shall tell the readers of Bird News all about that wonderful collection, but now I am only going to tell you of the birds of Monta Vista, the wild duck, the quail, the pheasants and the little buff cochin bantams that plays so important a part in their drama of life.

There are several acres enclosed and covered with wire and divided into three sections with every convenience and appliance for the rearing of these birds. Growing in this enclosure are a large number of dwarf olive trees, wild buckwheat bushes and other shrubs, there is a lakelet of spring water 20x40 feet, built of cement and so arranged that its overflow waters beds of alfalfa—there are besides other pools of water, so that the ducks thrive as well

as in their wild state. They are allowed to hatch out their young. The buff cochin bantams incubate all the pheasant eggs and the quail are allowed perfect freedom and build their nests where they please.

One little bantam did bring out six wild mallard duck and it was really pitiful to see the poor little creature's suffering when she saw her children on the water. The cochins have a lot of feathers on their legs and feet and the poor things would raise first one dripping foot and then the other, each time getting a little further in, until her anguish became so acute she forgot her fears and boldly stepped forth—her astonishment was tremendous when she realized where she was and it is needless to say she lost no time getting onto Mother Earth again, she contented herself thereafter with walking around the border of the lake and talking and clucking to the little ducklings all the time, and oh how happy she was when she could coax them out. She cared for them until each one was as large as herself, and a funnier sight I never saw than that little golden hen with outstretched wings, being held aloft by the six ducks under her.

During the nesting period the mallards are very cross, so we are obliged to take them out of the "Happy Family" compartment and put them in the middle one where we keep all the odd birds during this period. Here we have several piles of brush convenient for the birds to hide under in case of any quarrels, besides the low brushes are allowed to grow more dense here than elsewhere. The mallards make their own nests on the ground, laying from seven to eleven eggs each.

We did not have very good luck this season with our teal—of which we have three varieties—or the pin-

tail, the gamest looking one of them all, but we raised quite a number of wood duck, this variety with one exception—the Chinese mandarin—is the handsomest duck we have, the kindest and best natured. We have hollow logs hung around among the bushes and into these they fly, deposit their eggs and set upon them. We often wondered how they got their young out for the hollows are deep. One morning after a long watch we were rewarded by seeing first the mother's head appear, alert, anxious, neck outstretched, then her whole body. For a moment she poised on the edge of the log, then with a soft, sort of coaxing note she flew down, alighted and looked up towards the nest still uttering those queer soft calls, a moment passed and then, oh miracle of nature, from out that hollow log came a tiny down form, followed by another and another until eight little black and yellow ducklings stood trembling and excited by their proud happy mother. Straight over to the lake she took them, still encouraging them by her soft coddling voice, and then on to the water and away she sailed as happy as a queen. You should have seen those little rascals—swimming, diving, splashing, it was a sight.

Of the quail there are four varieties—the California mountain, California valley, Chinese, and Bob White. All make their own nests on the ground at the foot of a bush or in the long grass. There is a good deal of scrapping during the mating season, so there must be plenty of bush for them—they are all good fighters but the Chinese. Last season a pair of Bob Whites built under a southern wood bush and soon had their nest full of beautiful white eggs. The female was very wild and at times acted so queerly, we called her "Lunie," but she got down to her

setting in good shape and we thought all was well until one day we saw her flying about uttering queer short, sharp calls. We watched her—she went everywhere but to that nest. The next day it was the same way and we concluded, of course, it was “good bye” to that covey, when we discovered the cock nestled down the nest in good shape, and there he stayed for about ten days while that fool hen flew around and he brought out those birds all right, clucking to them and scratching manfully for them, but he fell short on the hovering part. He would stand with wings out, every feather up and talk and talk while the poor little things ran about peep, peep, peeping. A valley quail hen had a little brood about the same age and she coaxed them over to her. I think he was really wonderfully relieved when the last one left him. Their mother took no notice of them whatever.

It is claimed the mountain quail will not breed in captivity, or in a low altitude, yet we have had several lay fertile eggs, but the young invariably died in the shell—we never could understand why, unless it were for lack of something we knew not how to supply the foetus which was not strong enough to mature.

We mated a valley quail hen with a mountain quail and quite a number of the eggs hatched. The young had most of the coloring of the valley, but a long straight crest like the mountain, very gamey looking and with a call note entirely of its own. (To be continued.)

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BIRDS IN THE GREAT FIRE IN SAN FRANCISCO, 1906

The anniversary date of April 18, 1906, not unnaturally recalls some memories of that never to be forgotten event. The immediate results of the earthquake shock were many and serious. It was not, however, until a general fire alarm told to the stricken citizens that a new and, as it proved to be a more disastrous, agent had intruded its unwelcome presence. From a dozen centres at once the flames burst forth, and presently the van-guard of what soon was to become a general exodus appeared, the fleeing householders retreating in sullen reluctance before the advancing flames. In the midst of the tragedy, there appeared ever and anon a phase of comedy.

The smoke-begrimed, fire-scorched, nerve-wrecked cavalcade was a sad sight. The nature student or fancier could not, however, fail to note—the complications of bird life—which strangely intermixed. Canaries in cages, parrots on broom-handles, cockatoos in gilded cages from the wealthy homes already claimed space amongst the piles of salvage—hastily located in the wider streets and parks.

When, however, the stream of humbler folk blended with the main current many novel demonstrations of “sad experiences” became evident. Pets of all “types” were lugged along—with a devotion that was at once piteous and comic.

One dear old lady, whose white hair hung unkempt upon her pallid face, carried a coal-scuttle in one hand and in the other a breeding cage, with nests, seed boxes and two terror stricken canaries. The sani-

tary condition of the cage was proof positive that avian housekeeping, amongst the cotter-folk was not by any means up to the municipal standard of healthy homes. Next came a little Italian boy, with a stump-tailed Parakeet hanging by beak and claws to his coat-collar, while he trailed along a demi-john of "foot-wine."

Later we met with a "union" man, not yet fully forgetful of his home instincts, probably the hereditary reflex of many generations, for in a paper-protected red-stained wooden cage, carried beneath his right arm—both hands being fully burdened with bundles—we saw—crouching in abject terror—a British "lintie"—the poor, little foreigner probably even then homesick for the banks and braes—of the land of the gorse and heather. By noon the flames had already devastated an area one mile long by one and half miles in width, and in the seething blast-furnace conflagration—many of the refugees had been overtaken, and in the urgent and relentless retreat—had surrendered to a fiery-death many of the belongings and "pets" they had so bravely striven in the earlier morn to secure and rescue. On the opposite side of the leading thoroughfare stood the famous "Call" building, a magnificent stone structure "capped" by a restaurant, the loftiest in the world and the resort of all tourists, who enjoyed from its windows an unrivalled panorama of the city, bay and distant foothills. Along side this building were a number of smaller ones, one of which was the famous "Old Crow Whiskey" saloon. The window of this saloon had been placed at the entire disposal of two crows—*Corvus Americanus*—two fated "trademark" specimens which always had a large audience—outside as they disported themselves on a ten-foot tree stump, ate raw beef,

and drank "Old Crow" whiskey. One was especially a bad character, known to the police—he could talk, whistle and when "well-edged" would outrival in loquacity and gesture a star comedian. This specimen had a crippled wing. The fire was very intense, the big building was smouldering "inside" while furtive tongues of flame told only too surely that it was being eaten through and through. At this time I was in my office diagonally across the street, and was astonished in the midst of the disaster by the appearance of a large bird, which at first I took for a pigeon flying out of the fire-zone and lighting upon the window sill scarce on arm's length from where I was standing. On closer inspection I recognized the sound specimen of the two crows from the saloon opposite. The poor thing was terror-stricken and hung to the heated window for only a moment, and then flew over the corner of the building to an adjacent house, simply to experience, I am afraid, but a temporary respite from the fiery fate which befell its notorious companion. The bird had evidently escaped when the heated air had broken the plate-glass window of the saloon. One of the most extraordinary bird escapes which came under my personal observation was that of a canary. Its cage had been crushed by the falling-in of a building. It was absolutely flattened out, except at one corner, in which the bird was imprisoned. The bird still lives—like the solitary escaped prisoner of Pelee—a sole survivor, and sings, perhaps a Te Deum of gratitude to the great nature—god—which saved it, a veritable-brand from the burning. Many more instances might be recorded—but space forbids.

It is pleasant to record that the great western spirit of determination,

pluck, and manhood has triumphed and the relics and experiences of the great disaster are fast becoming "memories"—simply events in the stirring life of men and things which are blended in the evolution of the new city of San Francisco—indeed, this spirit is not inaptly described by the expression of an old bird man. A few days before the calamity I visited an old cobbler, a veritable "character" and a "natural" bird fancier. His store, a large big windowed room; window and room rich in a tapestry of cob-webs, dust and grime; a dozen or more cages, piled high with seed husks and droppings and tenanted by canaries, native linnets, California "gold-finches," and some unclassified specimens hung upon the wall—such was the picture presented. It is hardly necessary to state his nationality, he was neither a scientist nor an ornithologist, but his "observaiton" and mother-wit afforded a not altogether unsuccessful reserve. In a little grimy cage, sadly forbidding in the bright beams of California sunshine which filtered through the network of cobwebs—hung a solitary specimen of the Sociable Finch—the Bengalee hybrid—or as the old man said "soger" Finch. He remarked "Watch him"—presently the little bird burst into one of those silent rhapsodies of song, accompanied by the expanded tail and odd body movements, so familiar to keepers of foreign finches. The old cobbler with a gleam in his eye and a broad, but ungraceful grin upon his rugged face, exclaimed: "Look at him! Look! He is doing his damndest to be happy." A rude but truthful commentary upon the spirit that has "overcome." It is interesting to note that in connection with the recent terrible earthquake in Southern Italy—large flocks of birds suddenly appeared upon the coasts

of the British Islands and Northern Africa—evidently refugees from the disturbed "natural" conditions.

San Francisco, April, 1909.—Editor.

THE SOUTH POLAR TIMES

One of the most unique contributions to arctic ornithology, certainly is the series of colored sketches of penguin life, published in the South Polar Times, the diary of the National Antarctic Expedition of 1902-3. Dr. Wilson is certainly to be complimented, as both the drawings and the text are of exceptional merit. "A word about their food. Apart from pebbles and an occasional small fish, the food of the Adelie Penguin consists entirely of a shrimp-like Euphausia. The Emperor on the other hand lives principally upon fish, and cuttle fish, and pebbles. Why these birds swallow pebbles habitually is unknown. It may help them with their food, though the stomach is in no sense a muscular gizzard such as one finds in the domestic fowl."

"We have seen more of the movements of the Emperor than any other expeditions, but our observations are inconclusive. Since we have been frozen in we have seen Emperors on six occasions, once to number of thirty or forty, some of which are the biggest that have been recorded. One scaled ninety pounds, two scaled eighty-seven and one eighty, and in a series of thirty birds the range was from sixty-two to ninety pounds."

A ZOO PARK

A committee of leading scientists and aviculturists has been appointed by Mayor Taylor of San Francisco to consider the formation of a natural zoological park. We shall report in our next issue.

BIRD NEWS

 FREDERICK W. D'EVELYN, EDITOR

 Send all Manuscript to this Department

United States
Department of Agriculture
Library.

Washington, D. C., March 26, 1909.
Secretary, Avicultural Society of
California, 717 Market street, San
Francisco, Cal.

Dear Sir: We are in receipt of a sample copy of Bird News, published by your society. This paper is of interest in connection with the work of the department and we are writing to inquire whether it will be possible for you to place this library on your exchange list. If you can make this arrangement the favor will be greatly appreciated. In case your paper can only be obtained by purchase please place us on your subscription list and present your bill for Vol. 1 on the enclosed voucher, which should be signed in the space indicated.

Respectfully,
C. R. BARNETT,
Librarian.

The reception accorded to Bird News has been most startling—and can best be demonstrated by the reprint of a few of the letters received. Bird News can now be obtained from all news agents. We solicit the esteemed support of all bird fanciers.

Henry Oldys of the Biological Survey of the Department of Agriculture, Washington, D. C., writes: "Permit me to wish long life and prosperity to Bird News, the only periodical devoted to cage birds published in English in America."

Avicultural Society, London, England, writes: "I am very glad to hear that our Californian name sake has been duly started. I am sure we wish it every success and a long life. * * *

Charles B. Elder, Berkeley, Cal.: "I have just finished reading with a great deal of interest Bird News. I found it very instructive and believe that it is such a paper that has long been needed by all who love our feathered pets. Include me amongst your subscribers."

CHIRPS

Much manuscript is crowded out for want of space.

Bird Day is now a fact. Governor Gillett signed the bill.

A subscriber sends us a victim, "hanged by a piece of thread, left amongst the nesting material V. S. S."

Old maid hens are dangerous in flight cages or small aviaries—prone to become jealous and spiteful—and destroy eggs or young.

Many of the aviaries recently visited are overcrowded; birds, like humans, don't do well in tenement houses. Read what we said of "space" in our last issue.

SWEATING—Look closely after your nesting canaries—too close mothers are prone to sweat the nestlings. A few bits of match wood across the nest and just close enough not to touch the young birds answers well. Change the sticks as the birds grow. When ten days old no further precautions required

THE CANARY

PRACTICAL NOTES ON GENERAL MANAGEMENT AND BREEDING.

NUMBER 2

The worst possible cage for any class of bird is the bell cage. In the bell cage exercise is reduced to an impossibility, the result is that the bird, sooner or later, becomes diseased, internal troubles of the lungs and digestive organs being the most common. Undoubtedly the best all purpose cage for the canary is that known as the wagon cage, rectangular in shape, top, sides, and ends, of open wire work, the top arched rather than flat, this is more artistic and further prevents the cage top being used as a shelf. The open work enables the bird to enjoy plenty of light and fresh air, and adds much to its general appearance and welfare. The best sized cage for a bird, that is kept simply as a pet or for its song, is 14 to 17 inches long, 12 to 13 inches high, and 7 to 9 inches wide. Any wood used in its construction—and real fanciers prefer the lower part of the frame to be of wood—should be hard wood, such as walnut, rosewood, cedar or mahogany, not painted but finished in French polish. The all-metal cage has some points of recommendation, and perhaps for the simple amateur, might be acceptable. There should be no paint employed, even when enamelled the paint is easily pecked off by the birds and evil results follow. All metal work should at least be strongly lacquered to avoid the formation of rust or verdigris. A door should be placed in the center of the front, also at one of the ends preferably arranged to slide up and down rather than opening outwards. Water and seed receptacles are best arranged so as to turn inwards. This

prevents much waste of contents, and save the bird the annoyance of putting its head "through a hole" every time it desires to drink or eat. A false bottom should in all cases be provided; metal work with turned-up edges to form a tray being the most useful. The opening to admit the false bottom should not be so wide, that a bird could escape thereby; neglect of this precaution has led to the loss of many a favorite songster. The perches are most important; the shape and arrangement of these are so little considered, that much needless discomfort is the result.

The chronic perch of size and shapes of a lead pencil is an abomination. The taper perch is an improvement and should have at least a section of its length, not less than half an inch wide and three-eighths of an inch deep; personally we like pieces of branches, with the bark still attached; these are cheap, and when soiled can be thrown away. There may be some objection lodged, that the bark will encourage the red mite, but we have always been able to avoid this by simply not allowing the perch to become foul or to remain too long in use. The red mite and the perch is an unholy alliance, of which we shall have more to say later on; in the meantime it is well for the bird keeper to wash or renew the perches frequently and smear a trace of simple disinfectant or coal oil where the perch rests upon the bars of the cage. In a cage such as we have described two cross perches with an upper perch intermediate in position would be sufficient. Special perches may have to be arranged to accommodate the bird when feeding, but these are not necessarily concerned in the exercise of the bird and need only to be considered as above mentioned.

(To be Continued.)

THE MOURNING DOVE (*Zenaidura carolinensis*) IN CAPTIVITY

Abstract of paper by E. W. GIFFORD

On February 15, 1908, I purchased two of these beautiful birds, presumably male and female. The smaller specimen was in rather broken plumage, being minus a tail. A new tail soon made its appearance and so rapid was its growth that the increase in length was distinguishable daily.

Until the middle of April a small summer house, some five feet in diameter, was their home. Not until March 11th did they make any sound—on that date their mournful "coo" was first heard. On April 12th I changed their quarters into a larger aviary, with a ground area of 400 square feet. They were appreciative of the larger quarters and immediately joined the Barbary Turtle Doves which were feeding in the short grass. A week later energetic cooing upon the part of the smaller and above noted tailless specimen revealed the fact that both birds were males. During May and June they cooed incessantly during the day, indeed often far into the night, especially if moonlight.

By this time both birds were in full breeding plumage. They were constantly fighting each other. On June 16th I added two more specimens to the aviary, both females. Within a few days one of them struck up an acquaintance with one of the male birds, she urged her attentions upon him in a very business like manner, constantly following him with outspread wings. Occasionally he would

give chase, only stopping to coo when very close and that very seldom. The male birds still continued their personal battles. By June 24 both pairs had mated, one pair had already laid an egg in a very rudimentary nest, a few sticks placed on top of a box in a peach tree.

The ante-nesting actions were somewhat novel. The males seemed to be the active builders, the females usually sitting on the half formed nest or else close by. When choosing the nesting site the male would go to a likely place and squat down, raising the tail and lowering the head. He would at the same time utter a very short coo, a soft note out of the many given in the usual cooing. This particular note seemed to harmonize with the vibrations of head, wings, and tail. The domestic arrangements were not followed by much success, for notwithstanding eggs being laid and hatched, only two young birds reached maturity sufficiently to leave the nest. The period of the young remaining in the nest varied from 11 to 13 days. The male bird of one of the pairs having died, the unattached female made distinct overtures to the still remaining paired male. These overtures met with recognition, for the male bird seemed to give preference to the widow hen rather than to his own partner. This conduct caused distinct rivalry between the two female birds, and it was not until the paired female gave the "widow" several good thrashings that the male bird got wise, quit flirting and returned to his original and lawful mate. The breeding season terminated about the end of August, a rather earlier close than was recorded in other species of doves. Whether or not the interrupted course of "love" had anything to do with it or not I am not prepared to say.

Bird News

Devoted to the Interests of the Bird Fancier

Volume 1.

MAY-JUNE, 1909

Number 3

Raising Wild Fowl on a Southern California Ranch

Part II.

H. L. SEFTON, San Diego.

Very like the Bob White in coloring, except that its shades seem faded, the Chinese quail is a smaller, plumper bird. Its meat is dark like that of a dove and it has somewhat the same flavor. The eggs are about the same size and are heavily specked in dark brown. It is a very timid, bird, lies close to the ground when frightened and as it is so nearly the color of the ground we have lost quite a number by stepping upon them. I never saw one run, they have a way of sneaking off quiet and stealthily. I don't think much of them, for though they may be different in their native haunts, but here they seem remarkably stupid.

I presume I should have told of the pheasants first as they are the most important of the birds, but personally I don't care much for pheasants, preferring the duck or the gentle, gamey quail. A pheasant is a good deal like a peacock, or a turkey, very pretty to look at, but as a general thing, are not an intelligent bird, and very hard to raise to maturity. When the mating season comes, we select our birds from out of the "Happy Family," and make up our harems giving each cock from two to five hens, excepting the silvers. It is never safe to put more than a single pair of that variety together as the hens are very pugna-

cious and there would surely be a killing. But the Lady Amhersts, the golden, the English ring-neck, the versi-color, the Reeve, the Bohemian, the Elliot, or our magnificent hybrid can all take care of two or three hens. We always have a little screen of some sort, a pile of brush, or a leaning board in each pen to give the hens a chance to hide, as the cocks are pretty severe during the courting. We find a board about three feet long, so placed that it is open at both ends, is the best, as the brush breaks the plumage. Each evening we gather the eggs and at the proper time put them under the little buff cochin bantam hens, of which we have a large number. We have a regular system of book keeping, as all the eggs do not require the same length of time for incubation. We usually set two or three hens at a time and give the hatch to one. Our nests are of fine dried grass or straw. We use small boxes set on the ground, closed, except the front which is all open save for a six inch strip across the bottom. We have no trouble with mites as we sprinkle the eggs generously with an insect powder several times during the incubation. When the little ones come, we remove them from the nest to a box where they stay with their mother for several days. They are then turned out in the first section of the pheasantry proper, where there is an abundance of green growing stuff, running water and little pens of slats sitting around under the bushes in which are little

trays for their feed. We feed them hard boiled eggs, crumbled with selected ground cereals, and they are fed three times a day, besides we scatter small seeds around under the bushes for them to hunt for.

We raise a good many and we lose a good many. Some die because they don't seem to want to live; some eat and eat and still get thin and die. Others, like robust, hearty children, eat, run and sleep, grow fat and are a comfort to themselves and us. I must tell you of a pair that have given us much amusement and pleasure. So devoted were they to each other, we dubbed them "David and Johnathan." David is a little red-legged silver pheasant, and Jonathan a golden pheasant. Their foster mother, one of the little buff cochin bantams, after much clucking and days of sitting proudly, brought them forth, together with eight others of nearly as many varieties. After a few days, however, these two were noticed going off by themselves and even when the mother called they paid no attention. David took the lead and it was most amusing to see him when he found some dainty morsel, look around and wait for Jonathan to come and share it. The latter, as is the nature of their kind, was the more delicate bird of the two, and if the wind blew cold he would peep-peep and creep up to David who would "mother" him to the best of his ability. They slept at night in this position, close up under a bush, and the strangest part of all was that these two birds, unmothered and uncared for, save in a general way, grew faster and were far livelier than the rest of the hatch. They were the most independent pair; often have I seen them away down at the end of the run, a hundred feet and more, scratching

away and talking to themselves.

The handsomest pheasant by far that we have are the hybrids, the result of a cross between a Lady Amherst and a Golden. The plumage and style of the bird is magnificent, combining as they do all the best parts of these exquisite birds. The best part is that the young do not date back to their early ancestors but are like the parent birds, thus proving that a new variety is established.

Our breeding pens are 10x12, all communicating and all opening into the first section of the pheasantry. All the doors have spring hinges, for experience has taught us it is unsafe for two cocks to come together during the mating season. We had a battle royal between an English ring-neck and a Versi-color, resulting in the death of the latter, all caused by the man in charge failing to hook the door and a strong gust of wind blowing it open. When the mating season is over, everything is thrown wide open and there is one happy family of pheasants, ducks and quail all together. For the first few days there is a little sparring, but soon a truce is declared and peace prevails.

We are not in the business for revenue, but because we love nature and most of nature's children. I say "most" for there are times when one wonders why some things are made, for example, when we watch and wait for a setting of eggs to hatch, sure to be the kind one wants most, and then find the ants have been waiting too, and have found the little piped hole, gone in and actually eaten up the poor chicks alive. Or, when you have watched a quail's nest, counting the eggs each day until you know by their number that the hen will soon begin to set, and then

go out some bright morning and find a big gopher-snake, one of the harmless(?) kind, up in the nest looking like a miniature boa constrictor and when you kill him, as you lose no time in doing, and cut him open, you find several whole eggs and a lot of broken ones in his "little insides," it is then one doesn't love all nature, and one wonders why on earth such things live.

We have tried several times to stock this part of our state with hardy pheasants and Bob White quail. The ring-necks hung around the home place, finally layed nine eggs in a hay stack and then disappeared. The silvers did not do as well. We turned out a number of pairs of Bob Whites, months after while driving through a canyon, I thought I heard a "bob-bob-white," but I am not at all sure that my imaginations did not play me a trick, particularly as no one else has ever mentioned either seeing or hearing them. I fear we can never successfully introduce them here, we have too many coyotes and wild cats. The California quail roosts on trees and bushes, nature having taught them the dangers lurking on the ground.

I have often pictured to my mind the probable tragedy of our little covey of Bob Whites, huddled together, heads out, as is their custom, under some bush, secure in their innocence as the rested on the warm bosom of Mother Earth, fast asleep with only a little cheep now and then from one of the restless ones, suddenly a spring, one, perhaps two wild cries and the little band, less in number is scattered, only a few feathers left to tell the story. Night after night this is repeated until all are gone. A law of nature? Yes, but a sad, cruel law that something must always die that something else may live.

PROTECTION OF BIRDS IN JAPAN.

For many years, foreign writers have warned the Japanese Government that it was time to take some steps to prohibit the great destruction of the native birds. Owing to the protection afforded song and plumage birds by other nations, feather merchants were driven to distant lands to obtain a supply.

Japan offered a favorable hunting ground, with the result that millions of skins were exported from Kobe and Yokohama, including small birds and pheasants. The alarming increase of insect pests, have at last compelled the Japanese Government to issue a mandate prohibiting the sale and slaughter of native birds. It is interesting to note that it is not the bird lover, nor the ornithologist, but the fashion maker and the gentler sex, who are the guilty ones in bird destruction. The student and the fancier have to suffer the deprivation of securing specimens simply because commercial greed, knowing neither law nor science, places a value upon the birds—and their slaughter even to extermination is the result.

The recent visit of Japanese training ships to the harbor of San Francisco, recalls an experience, which in more acute times, might easily have become an international affair. A party of Japanese recently slaughtered more than 300,000 birds on an island belonging to the United States in mid-Pacific. U. S. officials left Honolulu to protest against this destruction and on arrival at the island, found no less than 335 cases of plumage, all destined—for ladies' use. We trust Japan will "protect us" against such pirates as these. The plumes of 115,000 of nesting herons were recently shipped to order. Note:—Nesting birds were killed. This infamous barbarity is akin to the horrors of the Apache trail.

RAISING CALIFORNIA VALLEY QUAIL.

(W. N. Dirks, Alameda).

So much enthusiasm has been shown over the success that I have had in raising and taming this game and beautiful bird, that I will try and have the readers of BIRD NEWS become better acquainted with him.

A few years ago, while picking wild blackberries, I flushed a hen quail, and as I knew it was nesting time, I looked around until I discovered her nest, containing twelve eggs, at the edge of some old brush. After marking the place, I continued my berry picking. When we were through with our lunch I told my father-in-law of my find, and asked him if it would be advisable for me to take the eggs to town and set them under a hen? He advised me to go to the nest later on, and if the quail was there not to take the eggs as she would be hatching, otherwise for me to take them and try my luck. I went back with another young fellow and we found the little hen there alright. She did not move until we had almost stepped on her, but when she did move you should have seen the fun. One dozen little yellowish-brown bunches of feathers scattered in all directions. I clutched at the nest, and on emptying my hand in my hat I found that I had five chicks. The little mother kept up a constant warning cry and not a sight or sound of the other seven did we get, but we knew that as the little fellows were not yet dry, they would soon become cold and would not be able to suppress their little peep-peep, and that of course would give us our clue. We captured them at last and started for town with them all wrapped in cotton.

On reaching home we found all of the poor little things stiffened

out just like dead. We at once made a fire and put them in the oven. Ten of them came back to life and I had the good fortune to get a setting bantam hen from a neighbor, and we put the survivors under her. After reducing the number by pecking two to death and stepping upon three, she finally raised five. It was a very sad parting for both foster-mother and the young quail when we sent the latter back to her home.

The first year I did not attempt to raise any as the five I had raised were all of the gentler sex. Last year, after getting a few males, I built a cage about twenty-five feet in circumference around a hollow oak in our back yard. All of the hens laid very freely. I sat thirty-three eggs under one bantam in the cage, and the quail did not seem to mind its presence in the least. Quite the contrary in the case of a rooster that I had crippled while hunting and captured with a dog. He would perch on the edge of the hen's nest and just as soon as she would get up to eat, he would hop down and do his best to cover all the eggs, and the hen had to forcibly eject him on her return. This occurred right along until I took the hen out and put her in a corner of the yard. She brought out all but three, and it was quite a sight to see the little fellows scratch and run to the hen at her call.

After hatching over one hundred birds, I raised only eleven. I held a post-mortem examination and discovered that each bird had a peculiar organic ailment that affected the intestines and would not allow them to properly digest their food. I called on Mr. M. J. Geary, Editor of "Western Graphic," and after discussing the subject we came to the conclusion that the alarming scarcity of quail last year was due to this disease



W. N. DIRKS
And His Pet Quail

which must have carried off thousands of young wild birds during last season. This year I am experimenting by setting out pairs, and making each place as natural as possible, to encourage them to nest and hatch. I am satisfied that if one had a piece of land about 50x50 to spare, and could devote his time to it during the season, that the quail would become as domesticated as a common fowl. They are very economical pets, I found that by the addition of grass, vegetable tops and bread crumbs, ten cents worth of wheat would feed eighteen birds a week.

Speaking of pets, I have one pair in particular (as the illustration will show) that can be fondled in one's hands, at which time their beautiful plumage can best be appreciated, and as the Chief Deputy Game Commissioner exclaimed as I placed them on his shoulder, "It is almost a crime to kill such a lovely bird.

If the State would encourage the raising of quail, and in fact all wild game, it would certainly prevent the extermination of such. Further would it not prove a better nature study for children than all the books that they might read on the subject?

Everything considered, the quail is far better off in a good roomy cage than he is in the wild, as he is the prey for all the vermin of the underbrush. The hunter keeps him busy during the hunting season, the coyote, wild cat and hawks at all seasons, and then the skunks and snakes eat the eggs. I have found a nest with twenty-two empty shells in it. But the worst enemy the quail has to contend with is the tame domesticated cat, that dear old cat to whom you may give the best of care and food, and who will repay you when your back is turned by poking his nose into everything, and will eventually get your pets. This same cat on a ranch will lay for and kill an entire covey of quail in a single day.

Mr. Dirks will be only too pleased to give readers of "BIRD NEWS" the benefit of his knowledge of quail if they will address this office

Our readers will be pleased to learn that the State has already organized several farms for the propagation of wild turkeys, pheasants and other game birds. These farms are under the control of the State Fish and Game Commissioners of California.

(The quail disease above mentioned is already under investigation by the U. S. Bureau of Animal Industry. The disease, Colibacillosis tetraonidarium, is an infectious one, caused by a microbe of the "coli" group. The lungs, liver and intestines, become involved. The bird becomes restless, sits apart, refuses to eat and generally dies in a few days. This disease is evidently allied to the

"grouse disease," so much dreaded by the sportsmen and game keepers on the moors of Great Britain.—B.N.

HUMMING BIRDS AS HOUSE PETS

(Mrs. Emerson-Crowell, Hayward, California.)

One of the most wonderful of nature's works is the "hummers." Its breast covered with iridescent plumage; its wings of gauze, hovering hither and thither over the bright blossoms in search of sweets, hidden in the depths of each corolla. When the cup is drained, with a quick dart he is away to other fields of luxury.

I had often wished to companionize them, and was so favored the spring of 1882. While my son and myself were in a small grove of cypress and gum trees watching birds, we found a nest of the Allen's humming-bird (*Selasphorus alleni*)—the young just about ready to fly. I carried them home in their nest and fed them with moistened sugar. After three or four days I taught them to thrust their long wiry bills into a glass vase filled with syrup made from white sugar; which they ate by a rapid thrusting of their long thread-like, white tongue, similar to the method of a cat drinking milk. Very soon they learned to go to their cage and feed themselves, and they were allowed to fly about the rooms through the day, as screens at the doors and windows secured them from escaping; they did not attempt to get out or fly against the windows, as wild birds generally do.

I soon taught them to come to my call, and feed from my lips, or rest on my brush, while painting. That recalls an amusing incident that happened to one of my pets, being "furiously" hungry, he made a dash at a mass of chrome yellow on my

palette, which stuck to his bill, and as I was hurrying to finish, I did not notice the mishap until his plaintive peep and fluttering before my face attracted my attention. Upon relieving the poor little "OMOLINE ORESE" of his super-abundance of yellow, he returned his thanks and made a hurried dart after a fly.

I have often seen both making short turns, and not stopping until one or the other had made captive a fly. Often they would perch upon the rounds of my chair, chirping with a squeaky unmusical note, as if to let me know of their presence.

When their food was gone they would poise themselves in the air close to my mouth and thrust their bills between my lips, then fly to their empty cup, then back to my mouth, repeating it until I answered their demands. Dr. J. G. Cooper while watching their flight one day, remarked that he never had known of hummers having been taught to gather honey from flowers, and I decided to make the experiment. I took some scarlet geraniums and placing them in a vase on the table, I called the pets, holding out my brush on which they alighted, then placed a drop of syrup in the centre of each blossom, then putting their bills in the drops of sweets, which they sipped greedily, trying each flower hovering in the air as we see them out of doors; they did not need a second lesson, nor did they forget their instruction.

When fresh flowers were brought in, there was a gleaming without delay. I noticed that the scarlet geraniums received first attention, and they would perch upon my arm and hover about me with evidently more delight when I wore a scarlet jacket, showing a preference for the bright colors.

After a few weeks, I noticed one of them on a rug where the sun shone, fluttering its wings as if wish-

ing for a bath. I gave it a dish of water; its feet being so small and the dish so slippery it could not stand, I placed a bit of moss in the water and putting the wee one on it, it began to flutter its wings, sending the water in tiny showers, and calling its mate to join in the glee. After washing, they perched themselves on the centre-bar of the window in the sunshine, dressing their feathers, stretching themselves on thier sides and acting as though quite well taught, and all from bird intuition, as they had never known a mother since leaving the parent nest. They were very apt in learning and fond of caresses allowing me to stroke them and turning their heads to one side as if listening to my words.

My pets were three months old, when a friend came to see me, as we sat chatting, the smaller one, and brighter of the two, alighted on her head, and remained until I called it, and as it flew to my lips for sugar, finding none, hastened to its cage, as it was alighting, its companion who was at the cup, gave it a sharp pick on the head which stunned the little fellow, and it dropped to the floor. I picked it up and placed it on the perch by the food, it would not eat, and seemed dazed like, dying on the following day. The remaining one went from room to room, calling most pitifully for its mate, and refused to eat, and after the second day it died. Indeed, I can not tell how much we missed our pets, for every day we had learned something new and strange in their habits and hitherto unknown ways, their happy, chirpy notes, quick flights, sporting with each other, their morning baths and winsome manner were as a golden ray of sunshine to brighten our every day life of cares, and I am just human enough

to say I missed my little friends and mourned for them, many and many a summer day.

(This charming little story was dictated by a dear, old lady already within the allotted span, but genial, bright and lovable. We know of no great favor than to sit with her, upon her rose embowered porch and listen to her delightful bird stories, as she relates from her long years of close observation.—Ed. B. N.)

COMMERCIAL FEATHER "BREEDING."

OSTRICH FARMING.

The commercial advantage of "keeping birds" is well illustrated by the great care which has recently been given to ostrich farming in the Transvaal. Through the official journal we find that special study is being given to the various plants, wild and domesticated, which are suitable as food for the great birds. The ostrich farmer is now finding out, what every old cage bird fancier has known for many years, viz., that different birds produce great variation in the style and class of feather. Further, the power of producing good feathers seems clearly to be an inherited character. High class plumage cannot be produced from birds of poor quality. The "strain" in ostrichs is now being the standard of selection, and will be given primary attention, just as we have seen don by the wise ones, when they would follow up the "breeding" of some noted "family" of Yorkshires or Clear Buffs. At a recent Edinburgh first flight show, two choice specimens of a "family strain" of canaries exchanged owners for the sum of \$500. The strong race characteristics had been so inbred that breeders could confidently expect the type to be perpetuated.

THE PEKIN NIGHTINGALE.

(By Dr. S. R. Jacobs).

This popular bird, also known as the Japanese Robin, East India Sun Bird and Chinese Nightingale, and being such an attractive bird, it is surprising that he has not more names, and claimed as indigenous to more countries, as he is certainly a bird to be proud of. In treating with the Pekin Nightingale, you are at once dealing with one of the most graceful and beautiful songsters known to bird-lovers.

There is much in keeping in captivity, birds for their beautiful plumage and likewise those for their entrancing song, but it is a rare treat to get a combination of both, and in the Pekin Nightingale, we certainly have both qualities, well defined. You may be the possessor of ever so splendid a collection of birds, yet when your visitors are admiring them, it is safe to say, if you have nightingales, that about the first question asked is, "what bird is that?" designating the bird that is here, there, everywhere, while you are looking at it. He attracts attention at once, if not by its song, then by his beautiful plumage, if not by that, by his general activity and graceful movements. He seems to take particular notice of you, appears to be "showing off" for your especial benefit and there is not a dull moment while you are in his company.

My close acquaintanceship with him for over six years, makes me his admirer and friend, and if those of my readers will at the first opportunity acquire a pair of these beautiful birds, you may feel assured of many days of delightful, interesting companionship and have an acquisition to your collection of birds, never to be dispensed with.

He is very grateful for any little delicacies you favor him with, and a meal worm, a fly or a fat juicy

spider, will cause him to make manifest his pleasure by a few of his excellent notes, rendered in his best manner. He will soon learn to take any delicacy from your fingers, and after he has become assured that you mean him no harm, he will eat from your hand and is easily tamed. When butterflies are plentiful, catch a few and turn them loose in the aviary, and you will then have an opportunity of witnessing some exceptionally lively movements on the part of your nightingale. The butterflies likewise do their share. This pastime affords you and your visitors a few exciting moments, and is a pleasant diversion for all, save the butterfly. The Pekin Nightingale is about five inches in length, smooth and sleek, of an olive green color, the throat of a light orange, gradually merging into an intense orange on the breast. The wings tipped with orange and the tail feathers black-barred with white feathers. The eyes are large, dark, restless and exceedingly bright and surrounded by a white ring. The bill is long, slender and of a reddish tinge.

The female is a little smaller than the male, the markings, however, are quite as beautiful, but not so deep in color. The male has a most beautiful warble and sings almost constantly, by night light as well as day. He has not a shrill note and his flute like song is never tiring. The females call is quite plaintive and frequently gives the cue for the male to sing. I have frequently taken visitors to my aviary at night and by directing the strong rays of light from an acetylene gas lamp on the nightingales, cause them to sing. The song at night, however, is more subdued, but quite as beautiful. The nest is built of strings, firmly fastened in the fork of a tree, and lined with dead leaves, grass, moss, feathers, etc. The eggs are

pinkish in color, and longer than the egg of the canary and are from 3 to 5 in number.

That they will brook no interference with their nest, is demonstrated by the following: After my nightingales had built their nest, it being the first of that character, I had ever seen, I went into the aviary with a friend and carefully inspected it, the birds meanwhile watching our every move, and hovering about nervously. We had no more than left the enclosure, when they proceeded to pick the nest apart and all the time keeping up a peculiar soft whistle, the interpretation of which was probably, "we built too handy for meddlers, let's move," which they forthwith proceeded to do, into a tree as far removed as they could possibly get from the first one. It is needless to state that I have not since interfered with their nesting, as they gave us plainly to understand, that they resented any interference.

Now, I have told you a few of the excellent qualifications of these birds, but I must not be so prejudiced as to overlook their one fault as an aviary bird, and even yet I give them the benefit of the doubt, as I must admit that I have never caught them red-handed, (or literally speaking red-billed) in the act. I have found, on numerous occasions, very young birds, probably a day or two old, on the floor of the aviary, and being unable to account for it, attributed it to the nightingales, having heard that they are guilty of the trick. Seeing the small moving objects and mistaking them for some toothsome morsel, pick them out of the nests and drop them on the floor. As I have before stated, however, I have never seen them do so, and as the evidence is only hearsay, let us not condemn, until more direct proof is furnished. Remember the bird is an alien, and being a "Japanese" native, let us

judge cautiously, or international complications may arise.

At any rate if they are really found guilty of this misdemeanor they can be easily removed before the nesting season begins, and as far as I personally am concerned, I love them enough to take the chance.

(The Pekin Nightingale (*Lithotrix-luteus*) presents much difficulty in sexing, as both male and female show individuals which are plumaged alike. Fanciers place some points of difference in the intensity of the coloring of the eye-patch, that of the male being more brilliant. The call of the female is a note of uniform tone and in its repetition is certain to be responded to by another call. The bird replying is almost sure to be a male.—Ed. B. N.

PRESERVE THE BIRDS.

The Commissioner-generals composing the North American Conservation Conference, representing the United States, Canada, Mexico, and Newfoundland, in their declaration of principles, embody the following significant paragraph: We recognize that game preservation and the protection of bird life are intimately associated with the conservation of natural resources. We therefore favor the creation of extensive game preserves, and special protection for such birds as are useful to agriculture."

The Lizard Canary is not a strong favorite. Its characteristic plumage disappears with the second moult.

When the young canaries are eight days old, a clean nest will add greatly to their welfare. See that it is provided.

Don't forget that bundles of wild plants, "just as the seeds form" are most acceptable to your birds.

Bird News

FREDERICK W. D'EVELYN, EDITOR

Send all Manuscript to this Department

With this issue we add some extra pages. This we are encouraged to do by the general expression of appreciation with which BIRD NEWS has been received. B. N. does not lay claim to be a bulletin of scientific ornithology, but a magazine of facts for the "bird fancier." B. N. is the pioneer magazine in that field for America—and is perfectly prepared to patiently and earnestly blaze the trail, through the virgin brush, until broader and clearer lands are reached.

Nothing too great for us to undertake, and nothing too small for our consideration if we are only assured of the esteemed co-operation of all bird fanciers.

NOTE—The annual dues to the Avicultural Society are one dollar and a half. This includes BIRD NEWS. Let us enrol YOU.

"The Auk" for April, 1909, says: "The Avicultural Society of California has begun the publication of a bimonthly official magazine, called 'Bird News,' devoted to the interests of the bird fancier. Volume 1, No. 1, for January, February, 1909, consists of eight octavo pages of well printed and well edited matter pertinent to the interests it represents."

The Auk is the leading ornithological magazine of the world. B. N. and California appreciates the compliment.

Wm. H. Crocker, Crocker National Bank, writes: "I can not invent an excuse why I should not help such a worthy object; and I therefore enclose my check for \$20 which I trust will help you a little."

The Avicultural Magazine, London, says: "We wish them every success, and feel sure that whenever an opportunity occurs the members of our avicultural society will offer them a helping hand. Thanks, London; we will be most grateful—even for the "stray feathers."

J. B. Evans, Berkeley, an old Crystal Palace exhibitor, says: "Well done! BIRD NEWS, your first flights are O. K.; put me down as a friend and a subscriber."

F. M. Smith, the world-famed borax king, invites us to visit his well-stocked aviaries. This is a courtesy which we shall gladly avail ourselves of.

We have been asked to investigate the report of "Big Jay Shoot" at San Andreas. One thousand blue jays were killed.

Governor Gillett has signed the Collier Assembly bill. This bill is a veritable blanket and covers "bird protection" most completely. The bill becomes law June 17, after which "plumes and feathers" will be "illegal goods." Milliners, wholesalers and ladies will do well to read and digest this law—or else. They will get into trouble.

Canary plague is not necessary, if the hygiene of the bird house is O. K. Plague is just septic fever and means "foulness" somewhere. More later.

The belief that Parrots, Love Birds and Cockateels, don't drink water, is an error, give them water.

"Paddy bird" is not an Irishman, but a name for the Java sparrow, it feeds upon "paddy" or native rice.

Let us hear from you, what results from the nesting birds?

THE CANARY

PRACTICAL NOTES ON GENERAL MANAGEMENT AND BREEDING.

No. 3.

The flight perches must be arranged, not so far apart that the bird finds it "too far to hop and too close to fly" from one to the other. Try also to avoid an overhead perch) which is generally accepted as a roost by the bird), so placed that the droppings foul a perch underneath. The reason for this precaution is self-evident, and doubly important if there is more than one bird in the cage. Never place the perches so that the bird in turning round finds it compelled to injure its tail against the wires. This leads to much broken plumage and is ever the trademark of a careless or ignorant owner.

The use of the trapezee perches or rings, we leave to the taste of the fancier and the bringing up of the bird. They may constitute a variety of perch but it is questionable if they are useful and they certainly are not attractive. In this connection we may—en passant—remark that we do not much favor the spiral springs by which cages are suspended. The motion is unnatural, and the perpetual uneasiness is distressful to the bird. The canary is a percher, and you will notice that its congeners in the wild state rarely perch up the fine and "jerky" twigs, but select the firmer and more rigid twigs and branches. Finches seldom indulge in the acrobatic feats so largely employed by insect-eating birds, such as creepers or tits.

Sanitation in the cage—i. e., the bird home—is just as vital for the health of the inmate, as is domestic sanitation essential for its mas-

ter's health and comfort. Cleanliness is compulsory. There is a great cruelty in a foul cage. The droppings, generally more or less moist, adhere to the perch, the birds' feet are scalded thereby and pain, cramp and permanent injury ensue. The cage should be cleaned out at least once a day, not necessarily throwing away all the sand or gravel with which the bottom is strewn, but removing the surface droppings and seed husks. Once a week the new "soil" should be placed in the cage, and at the same time the perches should be thoroughly cleansed, scalded, and carefully dried. Damp perches are injurious. See that the perch in cleansing is not in any way splintered. For this reason the not uncommon custom of scraping with a knife is not to be commended. A fibre nail brush is much more effectual and at all times safer.

The canary is a seed eater in the fullest acceptation of the term. It however, easily lends itself to bad habits, and will develop an acquired appetite for many extras which are oftentimes the cause of very serious results. Cleanliness in food is an essential, especially for caged specimens. Birds in aviaries, owing to their greater opportunity for exercise and fresh air, can afford to be less circumspect in the quality, but even here care needs to be exercised.

The quality of the seed should be the best. The difference in price between first class and poor seed is so trifling that even from a mere monetary point of view it should not be considered. In canary seed always select a good, plump kernel, bright to the eye, and never greasy, nor wrinkled. It should be sundried, but never fire or kiln dried as this destroys the flavor, also the nutriment value of the seed. Canary seed is, of course, the fundamental seed in canary management.

It is a rich, strong food and its quality plays an important part in the voice culture of the singing canary. The amateur, especially if ambitious to raise roller canaries; those great vocalists of cage bird "professionals," will soon be forced to recognize that the song muscles of the roller can not long withstand the over-stimulation of the strong diet, which proves to be only daily bread to the husky Yorkshire or Cinnamon.

We have already spoken of the gloss or polish on canary seed. This gloss may be natural or artificial; if the latter, the seed will taste musty and smells like rancid oil. Such a condition should prohibit its use as food for cage birds. Rape seed is a valuable adjunct to the menu and its quality is most important. It is a round, black seed, and readily lends itself to substitution or adulteration. Many kinds of seeds, similar in appearance, but much different in character, are included under the name "rape." For our purpose, it is well to remember, that for the finer breeds of canaries, especially so closely caged, it is best always to use the smaller red or summer German rape, not the big, black, coarse seed generally known as English rape seed. Rape especially of this type, is at all times more or less acrid and purgative; it frequently is the cause of an epidemic of diarrhoea in the bird room. This may be largely avoided if the above hint regarding the grade of the seed be kept in mind. Many fanciers used it only, as "washed;" i. e., running cold water over it several times until the water runs off clear, and then placing the seed in a fine sieve in an airy place thus making it ready for use next morning.

Hemp seed is another food with a "bad name." This seed is too rich

for every day use, but is excellent in cold weather or as a "pick-me-up." The oil it contains renders it a rapid fat former, and a fat bird is no more successful as a songster than a fat man is as a sprinter. Go gently on the hemp, and crush it when you do use it.

Maw or poppy seed is essentially a medicinal seed and should not be used as a routine food. It is helpful to breeding hens, young birds, and mopy specimens. These latter as well as diarrhoeic victims will often respond rapidly to a bit of stale bread, milk-soaked and peppered with maw seed.

Millet seed is rarely enjoyed by canaries, but an occasional teaspoonful in the seed box or spray stuck in the wires will form a change of diet or be an amusement to the birds.

Many fanciers have recently spoken favorably of Inga or nigra, that long, black spindled-shaped seed. It is oily, and is thought to be very helpful to breeding hens, as a preventative of egg binding. Singers with some hoarseness also seem to be benefitted by its use. For this latter we have found a pinch or two of lettuce seed, better liked and more effective.

Plantain, or rats-tail is a pleasant change, and adds a nice treat through the long winter days. It is best gathered in the fall, dried in a cool, airy shed and then placed, stalk and all, in clean paper bags. Kept dry it is good for several months.

Green food, groundsel, charlock, chick weed, lettuce, dandelion leaves, shepherd's purse can all, when clear, fresh and dry, be added to the bill of fare. Fresh or crushed sunflower seed is excellent and seems to be much liked. We use it liberally in our aviaries. Caged canaries must not have it too freely.

(To be continued).

Bird News

Devoted to the Interests of the Bird Fancier

Volume 1.

JULY-AUGUST, 1909

Number 4

Heredity in Canaries.

There is no more interesting, as there is no more vexed question, not only to the scientist but to the humble fancier, than the question of continued kinship or heredity. It is interesting to record that the fancier, perhaps unwittingly has in a measure at least solved many of the points, and has evolved a series of factors, i. e. stock birds which he can so blend as to approach almost any results he aims at.

The original canary was "green"—in course of time a yellow race was evolved. Many consider the yellow as a sport or "freak." i. e., arising some what suddenly, just as we now see the yellow grass parakeet coming into the common green series. Davenport of the Carnegie Institute at Washington, revives the theory advanced by Krukenberg that there is no green pigment in the wild canary, but the green is due to a yellow and a dark pigment. The yellow pigment is easily extracted by boiling in alcohol or ether. Green feathers so treated become dark brown or black. This ground color is not so easily acted upon by reagents, is in fact, fixed or basal. It would at first sight appear that these changes are altogether based upon admitted facts associated with physiological chemistry. It is however well known that there are morphological factors associated with color, which at least suggest that these may be "types" as well as pigments in the make up of color birds. What fancier is there who does not admit that in every

variety of canary we have the two colors, yellow and buff, and going with these are two distinct forms of feathers, which in a degree are at least cor-related; "buff" feathers possessing as more distinctive, length and closeness, yellow on the other hand giving color, brightness and silkiness of texture. Canary-breeders have very largely endorsed the teachings of Russ. Russ maintains that in color breeding, the choice of the male is determinative, while the female must be self-colored. Thus, e. g., to produce crested offspring with a high-yellow color, one selects a male of this color, but a green non-crested female. The more purely thoroughbred the birds are the purer their progeny. Let a yellow pair, no matter of what origin, from green or gray, produce young among which is a yellow male, let this breed next year, in a separate cage with a yellow female; young are produced among which is a yellow male. If such a male be mated with a female, likewise bred, true for two generations, their progeny will never produce anything but yellow offspring. Davenport at the experimental station above quoted does not confirm all the statements advanced by Russ, indeed neither do many of our best experienced breeders. Davenport found as the result of his experiments that when self-greens are mated together, all of the offspring are green. When self yellows are mated together all of the offspring are yellow. Yellow crossed with green, invariably gave mottled birds with varying proportions of dark pigment on the yellow back

ground. The distribution of the dark pigment is not, Davenport says: "wholly at haphazard. Green is usually found in the lateral tail feathers on the secondaries and wing coverts of one or both wings.

The interpretation of the results of breeding plumage color is not difficult and may easily be brought to accord with Mendel's law. As Davenport already explains, yellow is 'green' which has lost its black pigment, and concludes that there are in canary plumage two distinct and distinguishing factors—a black factor and a mottling factor. "Mottling is not a fixed pattern. The spots vary in position and relative size, they may cover nearly the whole body, or they may form a mere "tickling." The degree of mottling is inheritable. Mottling is a heterozygous character and throws mottled, clear yellows and self "green." These conclusions are very satisfactory, still the breeder knows the yellow bird is absolutely indispensable, he must breed with yellows. Double buffing may have its advocates, but sooner or later, blood will tell. The yellow shows a shortage and with that shortage feather qualities begin to suffer. Even in cinnamons, the use of yellow blood is essential to keep up color and quality. A real good bird is, after all, a "sport" and no man can exactly predict what his birds are going to throw, and such being the case the scientific heredity is at best, but a strong possibility, not a positive factor and the fancier while ever alert to obtain a pedigree—a strain of types—must also be prepared to breed at sight, ever remembering that selection at sight from amongst pedigree birds is more likely to obtain a reproduction of points, that when such a bond of kinship does not exist.

AVIARY NOTES BY A NOVICE.

(Member of the Avicultural Society of California.)

I wonder if the different readers of BIRD NEWS would not like to hear of the experiences of an amateur aviculturist?

About three years ago "feeling lonesome" for a canary, I visited a lady who advertised birds for sale, selected a singer that caught my fancy, a dear little yellow and green, top-knotted fellow with a wonderful voice. Having paid the price I carried him home in a brand-new gilt cage. I gave him the best of care, but not one note did he sing, and soon he began to shed all his feathers. At first I thought nothing of that, as it was the moulting season, but he continued to moult, and was as puffed out as a chickadee in winter. I did not think much of my "singer" so decided to buy another; this time I got a cage bird (the other was raised in an aviary) and he proved such a treasure that I wanted to buy more. My next purchase was a yellow female. My subsequent success in raising young birds made me feel the need of larger quarters. My husband suggested that he have an aviary. We built a hexagon shaped house with a high roof that served for shelter at night, the rest of the house was open. Later on we had to protect three sides with canvas on account of the wind.

That season I raised a number of young birds in the aviary, allowing the females to build their nests in small cigar boxes I had nailed up for them. One young mother grew tired of domestic duties and deserted her offspring when they were less than a week old, a homely, hoarse-voiced old female adopted the babies and was very happy in caring for them. During the summer I bought a pair each of parakeets, nuns, zebra finches and Javanese sparrows. I then thought my aviary complete, but la-

ter on when we moved into our new home with its large yard, I thought it would be a good plan to give the birds a large open enclosure for flight, for this we used wire netting with quarter inch mesh. We put in numerous swings and perches and seeded the ground with clover. I was disappointed with the result, for my birds looked lost in that large enclosure, so I again visited a bird store and brought home four strawberry finches and three sociables. I have been patronizing bird stores ever since until I have a varied collection, and a mania for owning every bright hued bird I see. I love my little feathered family, and I know they trust me, which is the same as love in birddom. Some of them eat from my hand, while others perch nearby and sing their sweetest in appreciation of my care.

So far this season I have raised but two canaries and one sociable finch. The canaries have made many nests, but the eggs have been destroyed just before hatching, or the birds died within a week after. I was at a loss to account for this until one morning I chanced to catch the female parakeet pulling a canary's nest to pieces and throwing the eggs on the ground. I had never suspected the parakeets, for whenever I saw the pair, they were always loving and kissing and making "goo-goo" eyes at each other. I did not suppose they had time for mischief, but I began to think a female can generally find time for that. I lost no time in catching them, and now they are doing penance in a small cage. I believe the husband knows she is in disgrace, for he has not kissed her once since their banishment.

I must tell you about the sociable finches, the birds that "make their mouths go but say nothing," as a little boy remarked when he had watched their attempts at song. Of

the three, one died from some sort of tumor under the tongue. The other two began housekeeping early in the season and made a nest on the ground, under some dried eucalyptus leaves where four small white eggs were laid, of these but one hatched. The baby was a plump, white, grub-like appearing youngster and without the usual bird down. He grew much slower than the canary babies and I began to fear he never would get feathers. I took occasional peeps at him and found him so timid he would nearly stand on his head in attempting to hide from me. The father bird is very tame and will eat from my hand, so I have hopes of becoming friendly with the young one.

For over a year I had but one diamond-finch, a silent little bird that chummed with a frowsy, "bald-headed" finch of unknown family. This bald-head looked as though he had been through the strenuous time following the great fire of three years ago. I have often wondered what was the cause of his moth-eaten appearance, for he has never looked any different since I got him. I presume though, he is like a good many people who are always "out at the elbow," but none the less happy. He is one of the most independent "bossy" birds in the aviary, as well as the most comical, a veritable Happy Hooligan in his manner of life. Lately I noticed the diamond finch carrying bits of twigs, grass, and rope threads into a small wooden box I had nailed up in the open. I gave it no importance as I had been told that some birds build sleeping-nests, or "beds," but later on I missed the bird, and fearing that it might have met with an accident, I began a search, and where do you think I found "him?" In that box setting on four small white eggs. My astonishment was great for I had supposed all along

that my finch was a male, the beautiful plumage had led to that belief. As the nest was mouldy from frequent rains having penetrated the box, I was obliged to destroy it. The eggs had all spoiled, but it is doubtful if they would have hatched even under favorable conditions. Since then I bought two more diamond finches and "he" quit the society of the disreputable looking friend. The three have made several "beds," and it is possible laid more eggs for the loss of which that meddlesome parakeet could give an account. I am hopeful of having better success with them another year.

Soon after we built the new aviary, my male zebra finch died from exposure, and for days the mate was inconsolable. Her grief appeared so genuine I named her the "Widow," and what hysterical widow she was. The constant chatter of the parakeets used to give her a case of "nerves," and she would cry and scold until all the rest of the aviary birds were upset. When he finally sickened and died I did not know whether it was from a broken heart, or nervous prostration, but I like to think it was the former for they were such an affectionate, devoted little couple, always admiring each other.

(To be continued.)

The Sultan of Turkey, recently granted a "new constitution," was somewhat of an aviculturist. His aviaries constituted a very costly hobby. Birds from all over the world filled innumerable cages, or other enclosures. A huge staff of servants was appointed to look after their wants. It is to be regretted that a close acquaintance with the birds of the air did not beget within that relentless potentate some of the finer touches of nature, which are so characteristic of our feathered pets.

THE BLUE JAY SHOOT

AT SAN ANDREAS

This shoot is not under the supervision of the Game Warden. Blue Jay slaughter is a feature or perhaps more correctly a spring entertainment in several sections of the foot hill region in California. The extent of the slaughter may be anywhere from 1000 birds per day up to 8 or 100000 in the "season." Our correspondent says. "The Jays killed here are not the crested variety, but the common Sierra Jay; the "flat-headed Californian" whose crestless head seems the typical low forehead of a villain." The bird has a bad name and this character is the accepted license for their slaughter. Many of our correspondents write: "The general belief is that they are destructive, but of this I have no personal knowledge." The principal reason advanced is the alleged destruction of quail eggs. This is certainly a grave "crime," for such interference with an egg and infancy stages of quail life, would naturally interfere with the mature or adult stage, when the sportsman steps in and makes his "bag." As far as the quail is concerned, it would seem to be merely a matter of time; for notwithstanding its undoubted advantage to the agriculturist, its existence is threatened, either by the marauder Jay, which is shot; or by the gunner man, who is permitted. Now, that the state game commissions are in earnest about restocking game sections, we shall no doubt have the matter of "Blue Jay shoots" scientifically investigated, and a more rational reason than a bad name be given as an excuse for Jay slaughter.

That the bird is a marauder and pirate is beyond doubt, nevertheless he is not quite so black as he is painted, as is evidenced by the in-

vestigations of Professor F. E. L. Beal, of the Department of Agriculture.

"Prof. Beal tells us that in the stomachs of 141 California Jays, (*Aphelocoma californica* and *Cyanocitta stelleri*) 35 per cent. of the contents for the year consisted of animal matter and 65 per cent. vegetable, traces of egg shells were found only in twenty-one stomachs; in another series of 300 stomachs only three contained egg shells, and two only bones of birds."

In a letter to the Editor, Prof. Beal says: "I consider the bird as rather too numerous for the best economic conditions at present; but as population increases and the woods are cleared away it will naturally decrease in number. I do not, however, believe in any such 'wholesale slaughter.' There is a right to every man to protect his property from a nuisance, but as the President of the Audubon Society says: 'Many of the hunters probably do not own a foot of land and that privilege is an entirely different affair from this wholesale slaughter.'"

PENGUIN AND GRAMOPHONES

Lieutenant Shackleton of "Farthest South" fame tells us "Amusements were not many but the gramophone proved a great solace and was much in demand.

In the summer time we brought out the machine to the penguin rookery, close to our hut and hundreds of the queer birds waddled out in line and assumed almost human attitudes.

They clearly expressed their astonishment at "Waltz me around again Willie" and it is only fair to say this air seemed to offend some of the older birds, who went off with an air of disgust. I succeeded

in getting some excellent photos of these gramophone concerts with their antartic audience of of penguins."

EGG OF *AEPYORNIS MAXIMUS*.

We have received a most excellent specimen of the egg of this great fossil bird. These eggs are extremely rare and are only found in the silt of a certain river on the west coast of the Island of Madagascar. This egg was originally in possession of a native priest who attached to it not only a great price but also some "wonderous" charms which certainly to him augmented its value. The method of obtaining these eggs is fraught with considerable danger. Many of the natives refuse absolutely to even search for them so much do they fear the attempt.

The eggs are buried in the river silt. The native hunter takes a long-shafted spear and probes deeply into the silt, until he strikes some hard substance. He is then compelled to dive under the water and slowly and, indeed, painfully scoop away the sand and, if possible, reach the hard substance. When he has thus succeeded it is most likely that he finds it is only a pebble. Sometimes the hunter will search a district for many consecutive months, and not even locate a pebble. Owing to the presence of numerous crocodiles the hunter is exposed to additional danger and many cases are recorded where the hunter fell a victim to the big saurian whose domain he had trespassed upon.

This egg, probably one, if not the last that will be found, was only obtained after seven years of persistent searching.

A RARE BIRD ALBUM.

The story of the Farallones tells of the egg-hunters of these famous rocks. Original notes and photos; only a few copies left.

THE RED MITE.

Does not its very name bring horror to the memory of every bird fancier who recalls only too vividly the "tortured birds ever restless and sleepless." To many the cause of that "restless" life is still a thing unknown, a veritable stranger.

The red mite is really a 'spider,' possessed of, in the adult stage of eight legs. The eggs are of course almost microscopical, and are generally deposited in any available crevice, such as the perch ends, wire holes, frame edges. In the young stage, just hatched, the beast is whitish, which is its normal complexion, the red being simply the red reflex of abstracted blood. The mite is nocturnal in its habits, as soon as the bird has settled in its sleeping place, outsallies the assilant, and by help of perch and wire, soon locates the victim, and then begins the attack. The foot suckers of the mite prove intensely irritating to the skin of the bird; to this is added the biting which is essentially a puncture made by the snout-like process of the mouth. Once in position it is impossible for the bird to dislodge the pest. When the number of parasites is great, the amount of injury and suffering they can inflict is very considerable. A cage once infected with red mite, should never again be used until it is thoroughly disinfected. The mites can remain "latent" for months, so that time can not be considered as a remedy. Remove the bird to a clean cage, first bathing the bird in some non-poisonous antiseptic solution, one made from Synol soap being very effective; use enough soap to make the water slightly soapy, wash the bird thoroughly, rinse out in clean warm water in which a little boracic acid has been dissolved. Then dry the bird, and dust the body and underneath the wings with insect

powder. The cage must be as before mentioned, thoroughly fumigated; then scrubbed with Synol soap, strong solution, washed off with boiling water and dried in air for 48 hours. To prevent the red mite: Don't use any old cages. Don't put new birds amongst your stock unless they are first quarantined and disinfected. Keep your cage, perches and all movable fixtures scrupulously clean. Smear coal oil, camphorated vaseline or oil of tar on the perch slots. Hollow perches or those fitted with special mite traps are recommended, but cleanliness and constant supervision are the essentials and with these the pest can be outgeneralled, without these it can not. Sick or ailing birds should at once be removed, and specially looked after, as they are prone to be attacked by the red mite.

Aviaries must not be considered immune, but demand periodical disinfection and white washing.

In connection with the subject of pests, we must not forget especially in aviaries, the common small, red ant, so abundant in some of our summer months. We have suspected that some of our deserted nests, as well as our dead chicks, are due to these little folks. It is well, where possible, to smear phenyle, crude oil, glycerine and bichloride of mercury or carbolated oil about the nests, branches of shrubbery, stems of plants supporting or leading to the nest sites. Dust the nests internally with insect powder. In all these applications of course using the necessary precautions to avoid injury to the birds, eggs or nestlings.

The Cooper Club has published most excellent ornithological "aids" in Pacific Coast Avifauna No. 5 (Bibliography of California Ornithology) and No. 6 (Ten Year Index to—The Condor.)

THE PAINTED FINCH.

(Emblema picta)

As noticed in our former issue several specimens of this bird were recently on exhibition in London. It is questionable if any of the fancy finches can rival this specimen in artistic coloring. No mere description could do it justice. It is a master piece of tinted combinations from its yellowish tail coverts to its beak, the upper mandible of which is black, tipped with scarlet, interlaced with green, the lower mandible being scarlet, with a patch of brilliant blue at the base.

The Painted Finch is a native of Northern and Central Australia. It is so protected by the government that but few specimens are imported and the fortunate owner is certainly to be envied. It is of the astrild or wax-bill family, and like them feeds upon seeds and insects. Millet, flowering grass and a few mealworms would form a good diet for aviary specimens. It is sometimes called the Mountain Diamond Sparrow. The spotted character of the breast and abdomen accounting for this confusion with the Diamond Sparrow, so common in Southern Australia.

DRIED FLIES.

What bird fancier has not heard of "dried flies?" The very name suggests to the "soft-billed" owner a way out from many of the difficulties which surround his particular hobby. "Flies" are really dried tropical insects, principally of the "beetle" series and are collected in the equatorial swamps and vast lakes of Mexico. They are found in myriads in these localities. They are gathered by the natives into baskets and after being dried in the sun, they are taken to market and sold

like any other "garden truck." These "flies" feeding as they do upon the rich, over stimulated vegetation common to their habitat, are rich in tissue forming qualities and therefore constitute a valuable article of nutrition.

The dark brown samples are the best and should be free from undue amounts of dust or stones.

Ground Silkworm Pupae is now upon the market. It is imported from Italy, and is sold in two degrees of fineness, coarse and powdered. The powder has a rather strong odor, but this does not seem to be objected to by the birds, as they take readily to it for food.

The Italian fanciers simply mix the powder, moist or dry, with biscuit crumbs and find it readily eaten. Silkworms thrive readily in California; they eat lettuce leaves with as much avidity as those of the mulberry. Why not raise silk worms? They will add variety to the menu of the soft-billed birds. A beneficial change from gentles and meal worms. Try the experiment and let us know the result.

AN EMPEROR PENGUIN HUNT.

In our last issue of Bird News we published some notes about the Emperor Penguins, great birds of the Antarctic. From the experience of Mr. Burn Murdock, of Edinburgh memory, we are enabled to publish the following interesting account of the capturing of an Emperor penguin:

That great bird of the cold regions showed its royal blood in its quiet but firm resistance to deposition. The description makes one feel that man is too petty and trifling a being to interfere with the monarchy of nature, or to overthrow

the throne and blot out the reign of such a sovereign.

I was on deck enjoying the quiet and beauty of the white night when I saw an emperor-penguin on a piece of snow not two hundred yards from the ship. Anxious to make a drawing of the bird, I went aft and let the mate know. He ordered out a boat.

The penguin was standing on a round piece of ice about fifty yards in diameter. We rowed up to a sort of hummock on one side, put two men behind the hummock, and then rowed round to the other side, where three of us landed. Then all five, advancing, closed in on the penguin.

He got on the mound of snow as we approached, but only looked slightly anxious as we drew near. Then, thinking his position was dangerous, he tried to get away. He slid down the snow on his breast, and paddled away with his flippers and feet.

One of the party made a successful rush over the hard piece of snow, and fell on the bird, and embraced it. The penguin looked quite shocked and threw him off with a hitch of the shoulders. Then it got up, stood on its feet, and looked at us. When we got near it again five of us made a rush at it. The boatswain got in first, and scragged it with both hands around its neck. The two rolled over together on the snow. The penguin got its neck free and began to peck with its beak at the boatswain's head, but missed its aim—fortunately for him.

Its strength astonished us. One man held its neck, two got hold of its flippers, and two more held its legs. Using all their strength, the men could hardly keep hold. The bird did not seem the least flurried nor put out; merely moved its flip-

pers slowly, and drew up and extended its short legs, but that nearly twisted our arms off.

It was too difficult a task to carry the penguin to the boat, so we strapped it round the middle, with flippers bound to its sides. We used the boatswain's belt, which was a broad affair with a big brass buckle, and we hauled it until the penguin collapsed like a Gladstone bag. With another belt we tied the legs, stood the bird up and drew a long sigh of relief.

So did the penguin—a long breath from the bottom of his chest. The buckle burst, and the bird began to hobble away on its still tied legs. It actually hobbled with dignity.

Then we all sat on it again without ceremony, for we were angry, and the penguin remained calmly dignified. We fastened him with a whole line from bill to toes, like a roll of beef, and carried him to the boat. He freed one flipper, just to show what he could do, but made no other effort to escape.

On deck the penguin preserved a sphinx-like dignity under very novel and trying conditions. All the crew stood about and marveled at him, but he took no notice of them. Fanny, the shop's dog, tried to play with him, and danced about him. At first the penguin paid no attention; then the hard beak came out with a flash. Off went Fanny, in no end of a hurry, and never came near again.

GOOD WISHES.

Mr. David Bruce, the well-known fancier of Montreal, Canada, writes: "I wish you all success with your paper and club." We expect to shortly publish a paper by Mr. Bruce on the "Scotch Fancy," the bird of the circle. This breed is a choice favorite and many excellent specimens come from the birdroom of Mr. Bruce.

THE NIGHT TOO LONG.

Keepers of tropical and subtropical birds have often been at a lost to understand why many of their specimens, especially during the winter months, would go "thin" and finally die. It was finally agreed that the very considerable, and to the imported birds, unnatural interval between supper and breakfast, had something to do therewith. To avoid this, a number of aviculturists had arranged to light up their aviaries, several hours earlier in the morning hoping that the light would encourage the birds to feed. The result proved most satisfactory. The idea has just recently been adopted in the small bird house at the London 'Zoo,' an arrangement of incandescent lamps, the object of the installation being to induce the feathered inmates to take breakfast a couple of hours earlier than they otherwise would do. It is controlled by a switch outside the building, and each morning at six a keeper turns on the lights. This, of course arouses the birds, who commence feeding forthwith, under the impression that day has dawned.

CLEAN SEED.

All seeds must be free from odor, and never used if musty, old or imperfect. Be especially careful that mice or other vermin never reach the seed bins or hoppers; it spells mischief if they do. All seed should be cleaned. Dust is dangerous and leads to disease. To clean the seed a small mill can be procured, or if fewer birds, a hair sieve will be found serviceable, or, again, the seed may be dusted, by shaking freely "out in the wind," or passing it through a succession of canvas bags. Buy the best and insist upon freedom from dust.

OUR FLEDGLINGS.

B. N. will give each issue a prize for the best short bird story; original; not to exceed 150 words; written by children under 16 years of age.

(Won by Alfred S. Brand, Culpeper, Va.)

We have many different kinds of birds here, and while I am writing now, I can hear at least five different kinds, and can see a lot more. I never saw so many mocking birds before this year. A large flock of Cedar Waxwings has just gone by.

Well, I will tell you about a nest I saw last summer. I went to see a friend who lives on the next farm to ours, and while there a Red-headed Woodpecker flew into his hole in a tree nearby. After a while he came out and another went in, and while he was in there another went in also. I thought this strange and climbed up to the nest, and how do you suppose the nest was? There was one opening in the tree and after that two branches of the tunnel and at the end of each was a nest, with four birds in each.

I started studying birds about three years ago and now I can tell all the birds around here by sight. I like Bird News very much.

CHILDRENS' PETS EXHIBIT.

The love of "living things" is innate in children. A display of their "pets" cannot fail in being both novel and instructive. Alameda, California promises such an exhibition next September. It is an excellent idea, and should be well supported by parents, guardians, educators and native teachers.

Bird News

FREDERICK W. D'EVELYN, EDITOR

Send all Manuscript to this Department

AUDUBON SOCIETY WOULD LICENSE CATS.

The Audubon Society of California at its annual meeting held last month advocated a license on cats as a means of decreasing the persistent slaughter of wild birds. This is certainly a practical suggestion of much importance and is worthy of active support by all bird fanciers. Statistics presented at the meeting showed that each cat in the state killed on average fifty birds per year. Indeed, it is claimed that cats destroy more game than all the sportsmen, boys, and collectors together. Owing to recent alleged bubonic plague epidemics, some are opposed to any interference with cats, claiming that they destroy great numbers of rats, the accredited host of the bubonic flea. It has been noted that in the very section where tramp cats were abundant, rats were exceptionally numerous. In many of our larger parks, where birds are encouraged to nest, and increase, so as not alone prove attractive features, but to aid in the destruction of insect pests, stringent orders are given that all cats found within the area be destroyed.

Edward H. Forbush, the well-known ornithologist of the Massachusetts State Board of Trade, says: "All who desire to harbor and protect birds, must eliminate the bird-killing cat."

The vermin of the house can be controlled by traps and poison—a ferret will in a short time drive all the rats from a building. A good "ratter" dog will practically exterminate the rats about a farm house.

Mr. Frank Chapman states in his report: "To these natural causes for the destruction of our birds should be added the ravages of the so-called domesticated cat. There are probably not less than 21,000,000 cats in the State of New York. While many of them are well fed pets, the larger proportion are to a greater or less extent dependent on their own efforts, often preferably so, for food. A single cat has been known to catch sixty wild birds in a season, and a well-known naturalist and authority on the birds of New England estimates that at least 1,000,000 birds are killed annually by cats in the New England States."

The cat is a doubtful beast as a "pet." It is less loyal and less worthy than almost any other "domesticated" animal. The tramp cat does nothing but hunt; day and night it is on the alert, and many a bird home tragedy is "completed" by the "poor pussy." The cat is prone to disease itself, is a distinct carrier of disease germs and should at no time be tolerated as a house pet, especially where there are children. Some of the most virulent cases of tuberculosis, brought to our notice, were distinctly traceable to the "pet" cat, specially "nursed" by some young member of the household, under the encouragement of some fond parent who patiently strove to inculcate kindness and mercy to the poor cat, which was "wasting away."

With such evidence the cat might safely be disposed of and profitably be used as a fertilizer. We would strongly recommend active measures and it would hardly appear these would be sufficiently observed by the mere imposition of a cat license. We, however, commend the wide-awake attitude of the Audubon Society and its good services in directing attention to this subtle enemy of the birds.

THE CANARY

Practical Notes on General Management and Breeding.

No. 4.

Breeding birds may be an art. Mating birds is certainly a science. Breeding considered as mere reproduction of species, is simply the combination of "any old thing" provided they are of different sex. Mating on the other hand is an estimate of probabilities and demands tact, judgment, experience and above all a fixed ideal of type. Mating scarcely comes within the province of the novice, but is relegated to and generally accepted as the privilege of "the fancier." There are however certain conditions, may we not say rules, which are essential to the successful raising of birds, whether as simple pets, or choice exhibition specimens. The novice cannot well afford to remain long in that stage of simplicity, but must start quickly to observe, think and conclude, or in other words he must early learn to recognize that birds like their more exalted entities of creation, viz, humans are individuals and possess tempers, likes and dislikes, mannerisms and characteristics which are in measure, just as potent factors for successful "unionism" as in the higher types. This power of observation and deduction, this personal equation is a most desirable attribute and the would-be fancier should aim at its cultivation, not considering either time or money spent therein as wasted material. Breeding type or show canaries in outside aviaries had better not be attempted by the novice, indeed the instances where it has been successfully attempted by the veteran are not specially numerous.

In selecting breeding birds, the amateur certainly should consult some experienced fancier or trust-

worthy dealer, and it is comforting to know that such do exist. Tell him what your wishes are, even confess you have an ambition to raise world-beaters, or as the American would say "crack-a-jacks." This confession he will not laugh to scorn, it is as innate in the fancy as original sin. He won't think any thing the less of you, indeed will in all respects get closer to you, and having put him on his honor and knowledge he will, in most cases at least, do all he can to "deliver the goods."

It is a good season between November and end of January to select your birds. Begin at once to study their individuality, get acquainted; mutual confidence, like bread upon the waters comes back after many days. Give the hens all the liberty you can afford, a small outside aviary if you have it, a room, or failing these large roomy flight cages. This means exercise, and exercise means health, and health means better chances for successful and desirable results. You may extend the same privileges to the males, but here your first study period of character will stand you in good stead. Many cocks are pugnacious and even spiteful, others again are over sensitive and lead miserable lives, when in and out in society. These different types must be treated accordingly. But bear in mind this community life, always admits of injury to plumage, and would be unwise if you contemplate exhibiting any of these particular birds. When in the flights, individual characters are always sooner or later in evidence, and as the stimulus of gentle spring returning, stirs up the deeper passions, you will soon have demonstrations of personability, which you had better record for further reference. Experience has shown that even in the flights, "or runs" it is better to pre-

vent the opposite sexes from seeing each other. There is an instinct of affinity, which is as subtle as it is imperious, and many a couple of birds "pair up" mentally, thus frustrating the best calculations of the breeder, for such selections are rarely if ever eugenically desirable. Such affinities if forced to accept other partners, rarely make successful "nests." This therefore is to be avoided. Necessity of selection, not local option must be your rule for type breeding. The breeding cage next demands your attention. The essentials are room, privacy and facility for cleanliness. A single compartment cage will serve in most instances and maybe all metal, or metal with wood frame. If you have a bird room, where you are monarch of all your survey, then the breeding cages with wire fronts are better. The nest boxes being placed outside thus admitting of easy observation and cleansing. Such a cage would need to be about 20 inches in length, height 16 or 17 and width 10 to 12. The water and seed furnishings are perhaps better on the outside, as such does away with the necessity of having to put your hand inside the cage. A draw board is better for the bottom, but it must fit well and not leave too much space when withdrawn, or the future youngsters may find such a convenient exit. Doors at ends of cage as well as in front are desirable. Where possible the self-sliding door answers best. Having got your cage, the next point is to prepare it for the tenants. This must be done by scraping, if previously used, then thoroughly scalding with boiling water. An all metal cage may be roasted in an oven, or fired by burning spirits or paper inside. We are presuming the amateur is using a wire front cage. Thorough disinfection is absolutely essential.

It is always desirable to paint the cage with a mixture or white wash. Kerosene oil, oil of cedar, solution of Synol soap, or camphorated turpentine; 1-2 oz. to 1-2 pint of turps, with 2 to 4 ozs. of oil of tar, makes an excellent wash and one which we have employed for years. These preparations must be painted well into all crevices to prevent the harboring of red mites.

Cages so treated must be exposed for four or five days to air and sunlight.

A final coat of lime wash, i. e., quicklime with a little carbolic acid and glue size, answers admirably. Some fanciers prefer the compartment cage with two or four divisions, these are convenient, and especially in mule breeding are very useful. Whatever form of breeding cage is selected, the general rules above noted are essential. Breeding cages must be perched to suit nest boxes and food and water arrangements. Style and position of perches have already been mentioned.

The nest itself is not a matter of indifference. Great latitude is available and many styles find their quota of patrons. The great essential, however, is cleanliness, and to this end the modern wire nest is perhaps best. The fine wire cloth type requires careful lining, otherwise the feet of the parents or young may become entangled. The open wire frame is free from this objection. The breeder may safely select either of these, line inside with a double layer of thin unsized felt, moulding the felt carefully into the form of the nest. Before finishing, sprinkle between the layers of felt, some insect powder, bupac powder, allspice or cedar wood sawdust. This precaution will do away with the red mite pest.

(To be continued.)

Bird News

Devoted to the Interests of the Bird Fancier

Volume 1.

SEPTEMBER-OCTOBER, 1909

Number 5

Wind and Migration.

The relationship of wind to birds during migration is a subject of much interest and while no constant, fixed relationship has been noted, there is much of a scientific value in the many observations which have been from time to time recorded.

Mr. F. Stubbs recently presented some compiled observations before the Manchester Philosophical Society, which are worthy of our consideration.

The head-wind theory is fairly popular but some writers have shown signs of leaning towards a contrary opinion. Mr. Clarke, British Association Records, says "strong winds have a curious effect on the flight of gulls, compelling them to move in a direction more or less directly heading the wind. Thus a strong westerly wind causes great numbers of gulls to seek the estuaries and bays of our east coast. On the other hand, strongly westerly winds will fill the estuaries and sea-locks of the west coast with these birds. Yarrell says: "It by no means follows that the direction of the wind, with which the birds drop on the land, is the same as that prevailing at a greater elevation."

Stubbs says, accepting the Head-wind Theory, "To the observer on the coast the velocity of the wind must be at least ten miles an hour. At an elevation of say 500 feet, allow 20 miles an hour. A Golderest, a familiar migrant, desires to cross the North Sea, a distance of 250 to 350 miles. We may call it for the pres-

ent 300 miles and allow the bird a velocity of 25 miles an hour. In a perfectly calm atmosphere the journey would occupy 12 hours. When the so-called favorable head wind is blowing, the part of the earth's atmosphere lying over Western Europe is moving eastward at, say, 15 miles an hour. The bird has thus to make its journey on a supporting medium in an opposite direction. In one hour it will have flown 25 miles through that body of air, but during the same time the aerial mass has moved 15 miles eastward. Between two points on the earth's surface the bird will have traveled no more than 10 miles. At this rate the journey will take 30 hours. It should be quite evident that no bird can make any headway against a wind with a greater velocity than its own speed of flight.

The general opinion seems to be that when a bird flies head to wind the air rushes past it at a total velocity which is that of the wind plus the velocity of the bird. Of course, this would be true in the case of a steamer or a swimming bird. But it is absurd to assume that it is so in the case of a flying bird, or even in the case of a swimmer in a strongly flowing current; the bird and the swimmer are wholly in a moving supporting medium. It is not safe to study avian flight by the aid of sailing ships. A ship is supported by the water but propelled by the air. The bird is supported by the air and propelled by its wings. Stubbs continues:

"Most of us, especially outdoor observers, form conceptions of the wind which are altogether wrong. We are

apt to look upon it as a seething current, and we pity the poor birds that are carried about by it. The substitution of the word air for wind in all matters relating to the flight and migration of birds would prevent a great deal of misunderstanding. There can be no doubt that if a bird cannot find shelter it will be more comfortable on the wing than on the ground during the progress of a storm. Mr. T. A. Cowling that on the ground during the progress of a storm. Mr. T. A. Coward tells me that during a storm of unusual violence the ducks on a Cheshire mere sprang into the air, heads to wind, and flew at full speed in the teeth of the gale, thereby keeping their places over the middle of the mere, to the surface of which they dropped as soon as the sudden storm was over. Their reason for this manoeuvre was, obviously, to be out of the danger of being between two conflicting elements, the stationary water and the moving air. In the air they made no progress against the wind, but had they flown with it, a few minutes would have sufficed to place many miles between them and the water they were so loth to leave. This, I think, is the explanation of the conduct of the Gulls mentioned by Mr. Clarke. The bird, then, can fly about about in any direction in this wind, but it must be remembered that the whole body of air is moving in some definite direction which may or may not coincide with that in which the bird happens to be flying. If the wind blows from east to west at 50 miles an hour at an altitude of 5,000 feet—and migration is carried on at far greater heights than this—and the bird is capable of flying through the air at 50 miles an hour, its net velocity, between points on the earth's surface, if it flies from east to west, would be 100 miles an

hour; on a contrary direction with a head-wind it would have made no progress at all like the ducks over the mere. If merely flying lazily round in a fifty-foot circle it would have traveled in one hour 50 miles which is the velocity of the medium supporting it. In a report submitted to the British Association, under the heading of winds, occurs the statement that "the importance attached to winds in connection with bird migration, has hitherto been much overestimated by popular writers, and their influence, such as it is, misunderstood. The conclusions to be drawn from a careful study of the subject are (1) that the direction of the wind has no influence whatever as an incentive to migration; but that (2) its force is certainly an important factor, inasmuch as it may make migration an impossibility, arrest, to a greater or lesser degree its progress, or even blow birds out of their courses. It is, however, a fact that particular winds almost invariably prevail during the great autumnal movements, and these have hitherto been considered by some as the direct incentives to such migrations. Such is not the case, and it may at once be stated that these supposed favorable breezes are simply another direct result of the pressure distribution favorable to the movements."

This last statement detracts very considerably from the value of those parts of the Report that treat of meteorological conditions. Stubbs says, and we agree with his conclusions: "The breezes are not in this instance the result of the pressure distribution but the very converse. Winds do not, in this part of Europe, move in straight lines. They come to us in a curved line from the Equator over the Atlantic, in a series of huge eddies or cyclones laden with a mass of water vapor,

and, I now suggest, bearing at migration times a horde of birds. I believe that birds habitually make use of these cyclones as means of traveling from one part of their range to another under the most favorable condition for the exercise of flight.

This aspect of the wind seems never to have been studied by the holders of the "Head-Wind" or "Beam Wind" theory. I have recently come across a passage in Chapman's "Wild Norway" that leaves little doubt that he has been led towards this point of view, and it is unfortunate that so excellent an observer has not thought fit to go deeper into the subject. As it is, his remarks are apparently merely tentative. I give the passage in full. "Except by aid derived from the operation of physical laws, the nature and extent of which are unknown to me, and by taking advantage of 'Trade-wind' circulations in the upper air, I believe that migration is impossible for short-winged forms of sedentary habit. * * * But that aid, and those advantages, may facilitate, and perhaps vastly accelerate, a process which is otherwise impossible."

I suggest that the bird takes up its position in the nearest part of the rim of the cyclone to its point of departure, and flies in the same direction as the wind until that portion of the aerial medium that supports and carries it arrives over that part of the world, or the nearest point, which the bird desires to reach. I will not run the risk of obscuring my point by dealing with anti-cyclones; the general process would be much the same. The ascending currents of cyclones must be mentioned, for a bird supported in one would soon be carried to a great height, from which it might start a long

"glide" on open wings, supported by the upward current in the manner of a gull flying above a cliff.

Mr. Clarke's actual observations support my theory. He points out that favorable conditions for autumnal migration are "the presence of a large anti-cyclone over Scandinavia, and cyclonic conditions to the westward of the British area, with a low pressure center off the west coast of Ireland." There is a strong outward and downward current from above the core of an anti-cyclone, and this would be most useful to birds crossing the North Sea in autumn. This was the state of affairs on September 23rd, 1908, when a large migration was noticed on the coast of Norway.

EXTRACT OF LETTER FROM COLOMBO, CEYLON

How nice it must be to have such a large aviary as you have. Mother is very much interested in birds and has watched them from when she was a girl. There are three Robins (so called in Ceylon), two honey-suckers and a tiny grass bird having a battle royal on our lawn. Just as I am writing they are hopping around each other and making such a noise—it is very funny to watch them. We have never had an aviary, but at various times have had one or two birds in cages. Our last bird was a Myna whose staple food was cheese. He had a fearful fight with an Indian Game Hen and poor old Peter was killed. Perhaps it will interest you to know that about two years ago mother imported some pigeons from Boston, Mass., and we have about a hundred now—the descendants of the Americans. Thank you for that "BIRD NEWS" you sent me. I am going to subscribe to it some day soon.

THE ROLLER CANARY.

The roller canary is the bird of song, just as the Belgian or the Scotch Fancy is the bird of position. It is most gratifying to note that size as well as song is now becoming a feature of the Roller. When we contrast some of these of today with those of 10 or 15 years ago the result of "big" blood is most evident.

The Roller is frequently known as the Hartz Mountain canary. Of course the canary is no more native to the Hartz Mountain than he is to Bethal Green or Lancashire,—but in the Hartz the birds have been brought to such a high standard of perfection that the name is inseparable from the breed. The bird is not a haphazard production, but one which is the result of many years of faithful and persistent breeding and schooling.

If you visit the bird district of the Hartz, you will, if you get into chat with some of the oldest inhabitants, and there are some very old ones, you will sooner or later hear the name Trute mentioned. Trute was a master-bird man, his birds looked better, and sang so much better than those of surrounding fanciers that the name at last became one by which the best birds were "branded" and sold accordingly. Never could we exactly get to the bottom of the romance of Trute.

An air of mystery still clings there around, be that as it may, we are much inclined to believe that our deceased friend was just one of those natural bird men who have an "instinct" which seems to "hit the right thing" in bird management and then are shrewd enough to follow up with constant attention, all the minor details, which are so often ignored by the general run of fanciers. It is the old story of close observation plus practical utility of the fact thus ob-

served. It is not uncommon to find that the less experienced think that the Hartz canary and the Roller are two distinct species. This confusion would be easily cleared up if it was only remembered that "Roller" is the type character, "The Hartz"—simply the place of birth. There are, as all travelers, in the fancy know, many other continental "bird" sections, equally famous for the production of Rollers.

Some years ago, when in New York City, the sign, "Bird Show upstairs" arrested our attention. We soon were among the exhibits. After the usual "birdy" talk the president showed us a souvenir of the sea, viz. a German bird-organ, which was one of the very few "survivors" saved from the ill-fated steamer La Burgoyne. What memories it recalled. The days of the amateur fancier when we thought the possession of a bird organ and its faithful use would guarantee perfect songsters. The amateur fails to remember that it needs much "ability" to get results, and the dull routine of the machine can never produce the results secured by tuition under a good "schoolmaster" (that is a good singing bird). It needs a good ear, long acquaintance with the birds and much patience to properly estimate a bird's value as a Roller. A good bird is slow, steady and uniform in his song, he will go through his song, with much character, vocalize his notes and mark time, in each roll, at the same time blend into the succeeding roll with sustained harmony. A quick slurring bird never makes a good Roller. The hollow rolls are the principal parts, and the definition of these, with the different "key" effects are the factors which go to constitute a good songster. It is by no means an easy matter to obtain a high class Roller, unless one is an expert or goes to the

fountain head and buys the birds he hears singing. The amateur breeder must ever remember that the birds have to go through the moulting season, during that time the old cocks are silent. The youngsters must not be neglected, it is a critical time, and it is just at this time that the experienced breeder falls back upon the machine. The bird organ must do its daily grind, the babies must be sung to and the song study kept up. This necessity terminates when the moulting is over and the old birds take up their singing. How often have we, "in the days of long ago" listened to the seductive voice of some dealer as he became eloquent upon the virtues of some "Nightingale or Woodlark canary"—that is a singer which he said was trained under the song of these birds and had acquired their notes; we under the spell have bought the bird, and then boasted to our friends of the different changes of note. Alas! time has taught us that the changes were often but repetitions and the "great bird" had been finally relegated to the class as a "singer," but never a roller. On the continent today such a bird would be ranked as a "country man," a singer perchance, but not a musician. The trained roller bears to the country man just about the same relationship that the opera star does to the street ballet singer. But don't be too much cast down and feel that the "ballet singer may not be worthy of his keep, he may be a good jolly companion and in spite of his harsh notes become a joy for ever.

Rollers are not infrequently—so we think—sacrificed upon too critical a standard of excellence, and in an effort to get rid of a "flat" note or like defect bred too "thin"—i. e. depth and clearness are bred out, and the entire song rendered correspondingly unsatisfactory. No variety, however, admits of greater reward

for skilled-breeding and training. None but those who have had much experience can estimate the perfection to which the throat powers of a Roller may be "fashioned." We are sometimes alarmed that the keen rivalry for notes and endurance may finally reduce the "roller" to the class of the battling linnet whose sole business is to rattle out notes loud and fast, with a view of confusing, and ultimately, of silencing his opponent. It can not be too strongly impressed that in no other species is the quality of food so essential as in the Roller.

Old breeders say that without German summer rape seed it is useless to attempt "make- Rollers." The seed must be dark brown or dark blue, perfectly sweet and fruity, and devoid of all acid or bitter taste. When you get this quality lay in a supply—and don't change your brand—at least not through the singing season. The good breeder not alone is careful of the brand, but takes care to remove the seed the last thing at night. On the morning the first meal is washed rape seed; i. e., seed which has the night previously been washed by pouring cold water over it, until the water becomes clear. This seed is allowed to dry and fed fresh each morning to the birds.

(To be Continued.)

Many ornithologists will recall that early last Spring, a well known fancier, Sir William Ingram, sent his agent to the Aru Islands to collect Birds of Paradise. The enterprise was most successful; many rare and beautiful specimens being obtained. Fifty of the Greater Birds of Paradise, (including 20 pairs) will be sent to the owner's estate in Trinidad, and will, after due period of rest, be liberated. The results will be watched with much interest.

AVIARY NOTES BY A NOVICE.
(Member of the Avicultural Society
of California.)

(Continued.)

When the Widow began to pine I thought to cheer her drooping spirits with companionship of some of her own kind, so purchased another pair of zebras. Mr. Zebra was inclined to sympathize with the Widow and enquire into her trouble, until his wife made such a scene he decided he had better leave the consoling business to some one else. Mrs. Zebra would chase after him screaming "Shame! shame! shame!" (or chee-chee-chee, which means the same thing) and give him the most vicious little pecks on the head. She knew how to loop after him all right. The poor little Widow used to look on and wonder what it was all about, for of course she was innocent of causing any domestic trouble. All the same Mrs. Zebra was glad when she died, for sometimes widows forget their grief.

I am inclined to believe this particular female wanted to run things to suit herself, for she persuaded her husband into helping her take possession of a canary's home built on the upper floor of a four-room flat. Whenever the canary left the nest Mrs. Zebra rushed in and sat on the eggs while her meek little husband stood guard outside. The canary could drive him away, but Mrs. Zebra was a fighter and could hold her own. The canary would then call in her mate and together they generally managed to oust the intruders. When the eggs hatched and the canary had to leave the nest frequently for food, the Zebras were right there to step in, and how they did love those babies! Mrs. Zebra tried to cuddle them all under her tiny wings and would fairly stand on her head trying to tuck them in nicely. She even went so far as to try

and remodel the nest to fit herself. The young birds died in a week, either loved to death or starved. After that, the apartment was vacant a long time until a pair of bachelor linnets began making repairs with a view to future occupancy should the right lady come along.

A pair of black-throat finches made three different nests—always taking apart the first to build the second. They were cute little hooded affairs with a small opening on one side for an entrance. In the first nest two tiny eggs were laid, but in some way became broken. I think the nests aroused the curiosity of the other birds and they no doubt interfered with results.

The Javanese—two females and a male—have built rough nests of twigs, leaves, straw; in fact, anything they could carry into the boxes, and have laid several sets of eggs, usually eight in number, creamy white and larger than those of a canary. As yet none of the eggs have hatched, the birds being so wild they leave their nests at the least alarm and remain away for long periods. I have seen them rush out in fear when some bird sounded a peculiar warning cry, or perhaps only two canaries were fighting. I am not anxious to increase their numbers, for while they are not destructive or meddlesome, they are so timid they create fear among the other birds.

I have many varieties of birds, of various colors and combinations of color, but all males with the exception of those I have mentioned above. I only wish they all had mates, for I derive much pleasure in watching their courtships and domestic affairs. They are a large, happy family, and with the exception of the parakeets have never seriously interfered with one another.

I have two tame bullfinches, Bobby and Peter, who are always on

hand to tease me for sunflower seed which they are unable to crack. I am glad they can not open them for they are little gluttons as it is.

Now that the parakeets are out of the way, the birds may be able to lay their eggs and rear their families. Should the foreign birds raise any young I will write another article for BIRD NEWS.

Since writing the above, the black-throats have made another nest and it contains two small white eggs. They did not take material from the old nest this time. Perhaps those others were only experimental nests.

In tearing out some old nests I found one that had contained eggs for so long I thought it must have been abandoned. I took it down carefully for I wanted to save the tiny eggs (but little larger than those of a humming bird), and in picking one out I disturbed a wee bit of animated fuzz that opened the smallest mouth I have ever seen. I immediately replaced the nest on the ledge over the door for I was afraid a whiff of wind might blow that speck of down over the trees and far away.

THE MOTOR PARROT.

The latest fad among New York motorists is a live parrot perched on top of the tonneau door. The followers of this fad have stationary cages affixed to the machine, and in these cages are carried along at a rapid rate parrots which utter all sorts of curious comments upon those who get in the way of the speeding machines. Some of these parrots are taught to warn pedestrians with such remarks as "Clear the road" and "Get out of the way." These trained parrots are very watchful, and in some instances relieve the chauffeurs of the necessity of ringing a bell or tooting a horn when crossing the streets.

COLOR FEEDING

We have recently had a number of queries concerning color feeding. We anticipate taking that subject up in detail later on; in the meantime the following will be useful: Red feed is the best for color feeding your birds, as it produces that rich orange shade so much desired. To each pound of red tasteless pepper add two ounces of hot Natal pepper, four ounces of moist sugar (that known by the grocers as "pieces"), and two ounces of best olive oil. Well blend the whole together, and keep in an earthenware jar covered from the light in a cool, dry place. Of course, you can mix up a sufficient quantity to moult your birds on at the one time. Commence by adding a teaspoonful of the color food as prepared to one hard-boiled egg and its equal amount of powdered biscuit or home-made bread crumb, gradually increasing the quantity of color up to two heaped teaspoonfuls to the egg and biscuit, well blending the whole together until the color is well incorporated with the egg food. Allow each bird a small teaspoonful of the egg food so prepared fresh daily, right through the moult. Add a little linseed to the canary and a little German rape as well, and twice a week add to each ordinary drinker of water a piece of sulphate of iron the size of a split pea, giving clear water the remaining days. You must, of course, put the birds on to the color feed just before commencing to moult, and continue until completed.

THE RIGHT SORT.

A. W. Bessey of Snunyvale, writes us: "I am importing Scotch Fancy and Yorkshires; the best that money can buy." Mr. Bessey has been a fancier for many years.

THE BIRD MANICURE.

It is fortunate that amongst other requirements the birds have no hair to cut nor to be "put up in style." As far as head gear is concerned it is only in the Crest or Crest-bred that any consideration at all has to be given. If the Crest feathers obstruct the free vision it is well, especially before breeding commences that the sides of the Crest be snipped off to above the upper margin of the eye in such a way as to give the birds the fullest benefit of the light.

The beak and claws are points of some importance in more senses than one. They will frequently be found much overgrown, particularly in birds past the second moult, and even in last season's birds the claws often have points as sharp as pins, although the claws themselves are quite short, and in no way overgrown. These sharp points are a decided menace to the safety of the eggs when the birds are breeding, and are frequently the cause of the eggs being "pin-holed" or pierced with small holes during the period of incubation quite accidentally and without malice on the part of the birds. To cut them is quite a simple matter, if you get a very small pair of scissors. A pair of sharp nail-scissors are excellent for the purpose. Do not, however, try to do it with a pair of large, clumsy scissors, as it is most difficult under such circumstances to avoid taking off just a little too much, and great care is required to avoid snipping off a claw and part of another toe at one snip.

To do it properly, take the beak first if it has a sharp point on the upper mandible projecting a little way beyond the extreme tip of the lower mandible. Hold the bird in the left hand, place the first joint of the forefinger underneath the beak, so that the lower mandible rests just

on, or in, the bend of the joint, then place the thumb firmly on the front part of the top of the head. This will keep the beak closed, and held firmly in position on the forefinger. Now slide the nail-scissors over the sharp point on the upper mandible until you feel them touch the tip of the lower mandible, and snip off what is between the blades. To finish neatly, wipe the side of the scissors, which is furnished with a small file, across each side of the tip of the beak to remove the sharp edge which may be left after cutting. The mandibles will now be found to fit nicely, and if these instructions are carefully carried out, you will never cut a beak close enough to cause bleeding, and the whole operation is absolutely painless—as painless, in fact, as cutting your own finger-nail.

Still, the necessity for cutting birds' beaks can be almost entirely avoided by keeping them always provided with a piece of culltefish to peck at. Do not expect to see a large piece come off. The tip of what appeared to be a vastly overgrown beak is but a tiny morsel when cut off.

Trimming the Claws.

Having trimmed the beak, turn the bird round and lay it with its back on the palm and its head towards the wrist. Hold it firmly with the three fingers across its breast, and keep the thumb and forefinger at liberty. With the thumb and forefinger of the right hand withdraw one foot at a time and place it in position between the thumb and forefinger of the left hand, so that the whole foot is held securely with only one claw at a time—the one that is to be trimmed—projecting from the fingers' tips. Hold the claw in front of a strong light, and you will clearly see how far the blood circulates down the claw. If the feet are washed

clean to begin with, it will help you to see more clearly how far the "quick" of the claw extends. Cut them off to within about a sixteenth of an inch of where the "quick" appears to end, not nearer, or it will make them bleed. Wipe the cut edge off with the file, as before, and treat each claw in the same way.

In the case of young birds with pin-like points on the claws which are not really overgrown, do not cut them at all. You can not take off even what seems to be a microscopical portion with scissors without causing them to bleed a little, and it is not necessary to cut them. It is sufficient to blunt them by just gently wiping the file on the scissors across the ends of them, or drawing them across a small flat piece of pumice-stone, or even a small piece of very fine sand-paper, folded into two or three thickness, so that the claw can be wiped gently across the flat surface.

BIRDS IN AMERICA.

There are 5,000,000 caged birds in the United States. The ordinary house pet, the canary, will eat twenty-five pounds of seed a year, which cost approximately \$1.50 per bird each year. This would give an average outlay of \$7,500,000 each year by the American people for the feed alone. The exporting of canary birds to the United States from the Harz mountain district during the year 1908 amounted in value to \$130,355, against \$130,354 in the year before.

It is proposed that sportsmen throughout the country unite in tendering a dinner to Dr. Cook and Commander Peary in New York some time in November. The plan is to make the movement a general one. A date between November 15th and 20th will probably be most convenient.

THE BUDGERIGAR AS

AN AVIARY BIRD

Mr. Frank Finn, the well-known practical ornithologist, in a recent communication suggests that more attention should be given to these interesting aviary birds. In our glorious climate these birds would do well.

"Speaking of intelligence, reminds me that I have noticed lately that the yellow Budgerigars, now so commonly bred, are much more lively in a cage than the green ones, and I have been told they are more intelligent. And this moves me to suggest that more serious attention should be paid to the cultivation of this pretty little Parrakeet. Surely a bird, which is so easily kept and bred, can learn to sing and talk, and displays such a tendency to color-variation, ought to be taken more seriously, and have a club to look after its interests, and see that it gets good classification at our shows. Budgerigars are just the birds for people who have not much time to look after their pets; they need no special food when breeding, and no nesting material; although they do not usually breed readily when caged in single pairs, they will do so sometimes, and the tendency would undoubtedly be increased by selection, while they are exceedingly hardy and always saleable. In fact, they could be made very serious rivals both to canaries and to the larger parrots, and I am sure this would have been done if they had been brought to the knowledge of those enthusiastic aviculturists of a few centuries back who domesticated our canaries for us."

We shall be glad if cage-bird fanciers will send any local news they have to impart, as such items are interesting to the general body of our readers.

Bird News

FREDERICK W. D'EVELYN, Editor

Send all Manuscript to this Department

CHILDREN'S PETS EXHIBITION.

The first of its kind ever held in California, was held last week in the famous home city of Alameda. The show was most popular as was proved by the constant stream of visitors which thronged its aisles every hour of the two days it was open. The classes for birds, while somewhat amateurish, owing to the tender age of the average competitor, were well filled. The birds—especially in the canary classes—were not by any means "standard types," still the interest in the prize winners was none the less intense. Most interest however centered around the classes for "small foreign birds"—many excellent specimens of Waxbills, Diamond Finches, Bengalee and Mannikins were entered. Most of which had been bred in local aviaries.

A nest of "grey pates"—first known to have been raised in California—attracted much attention.

This show may reasonably be considered as the first step towards a "Bird Show." It may not be many years before a Pacific Coast "Crystal Palace," "Great National" be announced.

AVIARY NOTES.

An interested subscriber, R. H. M., writes: "I know nothing about birds but I am anxious to have a mixed lot hard and soft bills, etc. I have in mind the construction of an aviary 8x12'" For the number of birds to area space, read article in former issue. You will find better

satisfaction as you "known nothing about birds" to take up either hard or soft bills—preferably the former, being seed eaters, they require less care, are accordingly hardier and will afford object lessons by which you can gain experience. Any variety of seed-eaters would be suitable, canaries, Java sparrows, and finches including the smaller foreign varieties which are very attractive and generally breed freely—"Bengalese, Diamond Sparrows, Waxbills"—you will find it better to have an uncovered flight. Grass sow a small area. Get some coarse weeds and plant thereon, also geraniums and shrubs. You will obtain a better effect by having fewer inmates and a jungly growth of plants and bushes. A wax bill, a sis kin or a bishop finch perching on a bunch of growing weeds or other green stuff—amidst the sun shine is a sight that looks so real and attractive that it well repays the extra care to obtain. Nothing is less attractive than the effect of a big cage of all sorts of birds. Make the protected part of your shed free from damp, wet and draught; provide cozy corners for sleeping boxes and perches. Later on you may increase your divisions and take up larger birds—Budgerigars, Cardinals, Cockateels, Lori-keets.

We should be pleased to receive photos of birds and nests in situ, with permission to have same reproduced in some of our London Exchanges.

Wesley T. Page, F. Z. S., has most generously forwarded for reproduction in Bird News, a series of his most excellent contributions to many leading magazines. These will appear from time to time.

Read Bird News—and pass it on.

THE CANARY

Practical Notes on General Management and Breeding.. No. 5.

Cage-bred canaries are as a rule bad architects. No matter what form of nest be selected it is well to throw into the cage some bits of candlewick cut in short lengths, a little clean cow-hair, dried moss or such like material, don't use it too freely.

The hen not infrequently throws it all out of the nest just before she lays, even so the provision of material has a sort of psychological effect, it encourages the hen to go to nest, and further if she has already a nest of young ones it prevents her from plucking her progeny.

When a hen has prepared her nest it is generally an indication that she will probably lay soon. At this time a supply of green food lettuce, water cress, chickweed, groundsel or cabbage sprouts may be given. Some fanciers like to place a piece of raw apple, banana or a bit of beef suet for the birds to peck at. It is a good practice, a variety of diet often saves trouble, such as egg-binding.

It is not advisable to allow a hen with eggs too free access to a bath. There are some hens, however, which seem to be natural born mothers and just always do the right thing. Others "ain't got no sense" and would as soon flounder into a bath and then return, water soaked to eggs, with an unfortunate after-result. Close observation and an appreciation of the natural qualities of the respective birds are the best guide for the fancier. We have often noticed that the broody hens would nestle into a bunch of water cress, or chickweed which was moist with dew or from being washed off. The amount of water thus obtained can do no harm, and if some hen

likes this form of cooling off it won't do any harm to gratify her wishes. One important point in placing nests in a cage is, do not place them too near the roof of the cage. Many clear eggs are the result of so doing,, it being impossible for the males to fertilize the eggs. In this connection it must be borne in mind that birds pair in different ways and there must be no obstacle to prevent them doing so when and where they select. Sometimes in spite of your most elaborate preparations a hen will elect to gather a few odds and ends into a corner of the floor of the cage and then make a nest. You must humor her place a nest-box upon the floor, and you will be fortunate if she accepts the compromise. We can not urge too strongly that in proportion to your instincts of observation and adaption so will your success be as a raiser of birds.

Egg-Bound.—Canaries generally lay early in the morning. If you should see a breeding hen, sitting "around" dull, mopy with plumage all ruffled up—sometime about the lunch hour—catch her very gently, examine the abdomen, and vent very carefully, if these are swollen, dilated, red and hot, almost certainly the hen is egg-bound—that is, can not lay the egg: Never attempt to force the egg out of the vent. Never break the egg, thinking the smaller size will make things all right—both practices lead to dismal results. Anoint the vent by means of a small hair pencil, or feather with a few drops of warm olive oil. Wait an hour, if possible, then if no results, give her two or three drops of warmed castor oil, wrap her up in a bit of cloth, leaving her head out, place near a fire or in the sun. If she passes the egg and seems weak, give her a few drops of wine and water or very dilute tincture of nux

vomica or spirits of aromatic ammonia. In worst cases it may be necessary to steam the abdomen, this is best done by holding the part, between your divided fingers over a teacup full of hot water; be patient, twenty or thirty minutes, and don't scald the bird. If this does not succeed the case is serious and a purgative dose of castor oil is about all you can safely resort to. Plenty of room, green feeding, a little scalded rape-seed, and not too frequent breeding generally prohibit the more serious cases of egg-binding.

The Eggs.—Many fanciers have many ways. It is better to remove the eggs each morning as they are laid. This obtains greater uniformity in the hatching and also in the age of the nestlings. Handle the eggs not at all, if possible, lift eggs by forceps made for the purpose, or a small thin egg spoon or a paper scoop; place the egg so removed in an egg box, one made of light wood or cardboard, a division for each egg—keep box in a dry, cool place, and don't allow it to be jarred or roughly handled. Keep each bird's eggs in their own division. Don't mix them up. The eggs should be returned on the evening of the day on which the third egg is laid. If a hen fails to lay on the third morning, you may conclude she is "short" and is only going to lay two eggs. In this case return her eggs at once. If as sometimes happens a hen lays only one egg—there is something wrong, don't let her sit; separate her for three or four weeks; try again, and if similar results, remove her from your breeding sets. Many fanciers use nest eggs to replace the egg removed. This plan is good in nervous or young hens; old breeders frequently do not need these substitutes. The nest-egg may be an imitation made of papier-mache, wood,

celluloid, or a "clear" egg blown out, dried and a little copal varnish run into the shell, to strengthen and make it sweet. Before returning the eggs examine carefully if you can detect any traces of red mite in nest; if so, follow directions given in a preceding number. It never does any harm to presume the red mite is "still there" and dust the nest with insect powder.

If the eggs are dirty from any cause, they should be washed with a little tepid water—and a camel-hair pencil, then dry by mopping with a tiny swab of absorbent cotton. The process is a delicate one, if the eggs get broken don't——swear. Be sure not to use hot water; "poached eggs won't hatch."

Incubation.—On the fourteenth morning, counting the day the eggs were returned to the nest, the young birds may be expected. Some hens are "kinder-smart" and hatch in thirteen days, others again will take a day longer. An expert can generally tell a fertile egg in about five days. Between the eighth and ninth day the eggs are "dark"—that suggests the eggs are fruitful. But it is a good custom not to be meddlesome, bide-a-wee and the results will be all the better for so doing. The less you disturb your breeding birds the better for "all parties concerned."

Broken Eggs—Not infrequently eggs get broken in the nest, if you discover such remove them at once. See to the claws of the old birds—manicure them when necessary.

Birds Dead in the Shell.—This is not uncommon and is generally due to the hen not turning the eggs on the nest, or from a lack of moisture due to too heated a nesting site. The nest should always be in a retired or shaded corner of the cage,

(To be continued).

Bird News

Devoted to the Interests of the Bird Fancier

Volume 1.

NOVEMBER-DECEMBER, 1909

Number 6

The Murder of the Innocents.

The innate desire to kill is surely a remnant of the descent of man. The persistence of the attribute is not complimentary to the much claimed "higher development." It is to be regretted that "sport" and barbarity are well nigh akin. Mr. William T. Hornaday, of the New York Zoological Society in a recent number of *Collier's*, makes some very strong protests against the "do-as-I-damn-please spirit which is destined within a few years to produce a barren and gameless America."

For the protection of wild life, a republican form of government is unquestionably the worst in the world. Thanks to the lawless element now becoming so dominant in this country, our once prized "freedom" has already become a Dead Sea apple.

Persons who have not specially looked into the matter have not the faintest conception of the power and deadliness of the forces that constantly are warring upon wild life. In the United States, so I have been told by a very competent authority, about five hundred thousand shot-guns are sold annually, and about seven million loaded cartridges. Perhaps three million cartridges are re-loaded annually. Of this enormous output, perhaps one-tenth are used on clay pigeons; and the remainder, whatever it may be, is aimed at wild life. A very effective breech-loading shotgun of Belgian make can be purchased for five dollars, and no alien laborer who desires to kill our song-birds for food is too poor to buy one!

Throughout North America generally, what are the principal factors in the destruction of wild life? It is easy to catalogue them, in the order of their deadliness. Here they are:

1. The "resident" pot-hunters, who kill game all the year round, part of the time for sale, and part of the time to save butcher's bills.

2. The commercial killers, who slaughter to secure salable plumes, hides, teeth, oil, fertilizers, or other products.

3. The sportsman, who shoot according to law, but kill to the limit that the law allows, regardless of the future.

4. Wanton destroyers generally, who kill wild creatures because they can, regardless of reason or decency.

The passenger pigeon is gone forever.

The heath hen (of Massachusetts) may be blotted out any year.

The pinnated grouse of the West now exists in a few localities only.

The splendid sage grouse is fast being shot off the cattle plains and soon will disappear.

The great whooping crane is very nearly extinct.

The trumpeter swan is so nearly extinct that skins are not procurable.

The California condor will last about twenty years longer.

The Labrador duck and great auk are quite extinct.

The "plume birds" of Florida are but little more than memory; and so are the scarlet ibis, roseate spoon-bill, and flamingo.

The wild life of any country is the

property of the nation, and if preserved it forms a valuable public asset. To protect it is not only good statesmanship, but it is also one of the bounden duties of good citizenship.

No wild game can long endure slaughter for commercial purposes! As the supply of legitimate game sinks lower and lower the market shooters and caterers encroach more and more on the list of birds that once were forbidden. Fancy a sorarall or a reed-bird as a thing to eat! When a large cold-storage house in New York City was searched in 1906, the officers of the State Game Commission found the following dead birds: 8,058 snow-buntings, 7,607 sand-pipers, 5,218 plover, 7,003 snipe, 788 yellow-legs, 7,560 grouse, 4,385 quail, 1,756 ducks, 288 bobolinks, 96 woodcocks.

The protection of wild life is partly a matter of business, and partly a campaign of sentiment. Every American farmer with a grain of reading intelligence now knows very well that the killing of insectivorous birds means certain financial losses for him. The most intelligent farmers know that only the Cooper and Sharp-shinned hawks are so destructive to other bird life that they deserve to be shot on sight. Next, it is to be hoped that every farmer will learn that surplus house cats are very destructive to bird life, and should not be tolerated where birds live and breed. Maine has learned, and so has British Columbia, that big game can be a very valuable asset, and that the bag limit should be reduced to the lowest point.

Today, precisely as it was twenty-five years ago, the great need of the hour is the education of the masses to the necessity for wild-life conservation, and the creation of a fifty times better public sentiment in fa-

vor of the enforcement of existing laws. The game wardens need the support of the law-abiding people of their respective communities to an extent that now is rarely found. Very often it is the Game Warden vs. the Whole Country! Wardens complain that in many country places it is almost impossible to secure a conviction of an offender against the game laws. Many men who consider themselves decent citizens consider it a smart thing to evade the game laws. But the worst discouragement of all comes from the "sympathetic" juries.

Unless a great change takes place in public sentiment, twenty years from now there will be no wild game of any consequence left alive in the United States outside of the absolutely protected game preserves.

Despite adequate game laws and the untiring, unselfish endeavors of sportsmen, the outlook, it must be confessed, is not reassuring. The reason is simple and all-sufficient—the American people as a whole are so slow to kindle to a supporting sentiment—that the wild life may be gone like the bison before they wake up.

A not uncommon custom on our marshes is observed by the crack-shot with the pump-gun, to secure the limit bag as rapidly as possible, then continue his efforts until all in the party are provided with the limit. As Mr. Hornaday says, it is a "smart thing to evade the game laws" and equally brave, to "play fair" and deprive the birds of even the courtesies of war.—B. N.

"Box-moulting," where the bird is placed cage and all inside of a wooden box, never has met with our approval and all its claimed advantages can be secured by other more rational and humane methods.

EGYPTIAN BIRDS

Mr. Charles Whymper, the well known ornithological artist, has recently issued a valuable book "to assist the many travellers and others who now annually visit Egypt to identify the birds which they will see in the Nile Valley. To the ornithological commuter, who daily travels molewards and notes the bird life as demonstrated on the mud flats and marshes, — those unromantic areas, of scenic approach to Alameda and Oakland—and sees there the restless Sandpiper, the phlegmatic Gull or the aristocratic Heron, would perhaps, when "doing the land of the Pharos, feel a touch of the fraternity that makes all the world kin, when he saw the birds of home outlined against the shadow of the Pyramids or wandering amidst the lonely silence of the Sands of Isis. Such a traveler could not fail to appreciate Mr. Whymper when he says of the Heron—He lends his picturesque form to Egyptian scenery, just as he does to our homely American waters or wilder Scotch lochs; he always, somehow, goes well with the landscape. Shelley says, "It may be seen in considerable numbers in company with Spoonbills, Pelicans, and other waders." And it is one of the curious facts about bird life here, that so many of the birds that we know only as solitary and not at all given to consorting in flocks, either with their own species or any other; save at breeding stations, frequently do show a complete difference of habit in this respect in this country. seven birds flying towards us. The I remember seeing a singular line of first was a Heron, then a Spoonbill, then a Heron followed by two Spoonbills, and the straight line ended with

two Herons, all so close together, the bill of one nearly touching the tail of the other, and all keeping time with the utmost precision.

To enumerate all the places I have watched this bird at is unnecessary, as at one time or another I have seen it everywhere.

 Raise Game Birds

United States does not make good use of its great possibilities. It is a notable fact that the older countries, for example, Germany and England, have now a far greater number of birds per square mile than has probably any State in the Union. In other words, the annual bird crop in England, Germany and France is able in a much greater measure than with us to control the insects injurious to vegetation, and to provide a surplus of game birds for food to such an extent even that at least two species of wild plover, in addition to semi-domesticated pheasants and grouse, are exported from these countries to Boston and New York markets, and sold at price less than that at which our native game is offered. Well-advised and extensive operations for developing our bird population, for the purpose of providing an adequate safeguard against the advances of insect pests, for example, the gypsy moth, cut worms and other noxious insects, are necessary, as well as to maintain an aesthetic asset of the State, and to provide game birds for food and recreation. Action should be taken particularly by enacting such laws as will not alone permit encourage the rearing of birds of all species under suitable conditions by people who are properly qualified to undertake the work, either for pleasure or profit.

Read Bird News—and pass it on.

THE ROLLER CANARY.

(Continued).

Hemp-seed can only be used to a limited extent; it is too cloying and renders a bird fat and indolent. Canary-seed may be used under much the same terms. When moulting, or the birds are not in song, this seed may form part of the daily diet. It is too stimulating; it forces song but at the expense of ultimately producing a "cracked" voice. Better omit this seed if long sustained singing is aimed at. A trained fancier can tell by the tone of the bird's singing whether or not the bird has had too much "crazy-seed," for the cocks become much excited and ring out high, sharp notes, as harsh as a rasping buzz saw, and as inharmonious as a stump orator.

It is unnecessary to say that next to food cleanliness and ventilation are most important in the "making of a roller." The general rules of management must be along the lines, as recorded in the serial article upon the canary. Breeding stock must always be the best. A good "strain" must be the "hall-mark" permitting a desirable "brand" of birds being secured. After the young birds have been taken out of the aviary, it is best to cage the hens by themselves. The young cocks must be so placed that they cannot see any other birds. Note carefully the attempt these latter make at singing. A bird that "shapes" well, i. e., shows a good full throat, firm on the perch, at the same time free from stiffness in action, will be worth watching.

The roller-warble is a throat note and a youngster giving this, at the same time keeping his "mouth shut" is probably a master singer in embryo. Attention to the schoolmaster, which of course is hidden, is also a worthy trait and deserves recognition. Caging off is the next forward

step and perhaps there is not one thing in bird-dom which demands more tact and experience, plus that invaluable intuition, that personal equation in the fancier, which is of more value than much fine gold. The individuality of the bird must now be judged, its physical and mental quality. One bird will be precocious, another shy, one frail but nervy; another robust but whimsical and so along the entire gamut of possibilities. The non-recognition of these "personalities" has blighted the career of many a "lost star."

Broadly speaking, the longer the youngsters remain in the flight cage, the better, it makes bone, muscle and general tone. Never attempt removing any of the birds until they are hard on seed. Presumably all is well, the moult over and October already upon the calendar, you may take your pupils place them in the training cages—and then learn to labour and to wait.

Once education begins, the bird becomes a veritable victim of discipline.

Small wire cages, a trifle larger than the well known wooden import cage are best. Every precaution of hygiene must be observed. The training cages are best placed in rows so that the birds can see each other. Outside interruption must be avoided as much as possible. Absolute isolation will in some temperaments produce such shyness that the bird becomes useless as a performer. Soon after the pupils have become attentive to the schoolmaster, they must be penned off, that is, partitions placed between the cages, so that each bird will work out his own standard, uninfluenced by the sight of a competitor. Very soon the skilled fancier will begin to pick out his birds, and classify them as to voice-characters.

Roller singing is music, and a mu-

sical ear, is almost essential to the successful trainer. To obtain this we have no rules, nor can we suggest any special "feeding" which could guarantee results for—the fancier.

It is strange that in "making-rollers" it seems absolutely necessary to regulate the amount of light. The cage must be darkened. Without this precaution the tone becomes harsh, the volume too coarse, and high notes too much in evidence. It would seem as if the bird had a soul of its own, and in the twilight and shadow poured forth its very heart-throbs, tremulous with the melody of some great nature anthem, responsive to symphonies of praise out born of creation's tribute to the Life-giver.

This process of darkening is we are satisfied often carried to great extremes. First, it is well to remember this procedure is only to be employed in perfecting our best birds, the choice performers, "the birds with a soul." We have found that the very best results are obtained by the twilight method, the environment of the nightingale. A subdued light, so that the birds can easily find feed and water, and enjoy fresh air. The heavy blanket dropped like a huge curtain in front of the training cages, we never did like. It is clumsy and unhealthy, and, we are satisfied devitalizes many an otherwise good singer. Mention must be made of the song or training box; generally made of metal. Into this "casket" bird and cage are placed, the doors are shut and out of the dungeon in time issues the weird, sepuechral notes—so much sought after. It is claimed that this method softens and tones down the song, the bird not being able to record his high notes which are "killed," so the song gradually softens down into the desired tone. As the training advances, and the notes lower, more and more of

the door of the casket is opened. The singer is gradually caused to forget the high notes and produce the throat warble. Remember you must have patience; and even then many a bird will be passed as a "breaker" to the lower grades before you obtain the high class bird which sings unbroken opera. Many of the general public and not a few of the fancy imagine that a singing-roller must be a male bird, such is not the case, for many of the "ladies" make good performers, and indeed take lessons so aptly as to become perfect artists. Generally, however, "singing hens" rarely make good rollers, and nearly all drop off when the first season is over, or domestic cares intrude their responsibility.

In the clear roller, the cock was to be separated by the more intense yellow of head, chest and rump. Further the male-characteristics, bolder figure, fuller eye, thicker body are generally not "hidden-signs" to the experienced fancier. In the green or foul marked the above characters plus a brighter tint of colour, are also suggestive of the male. A fancier will rarely be in error when he notes how the doubtful sex behaves in mixed company; placed along side of a hen, a male bird will sooner or later make display of song efforts. In the matured bird, especially if in full song, examine the vent, in the male, it is prominent—puckered, circular and slightly elevated. In the female, more transverse flat and relaxed.

A male Frigate Bird (*Fregata aquila*) popularly known as the man-of-war-bird has been shot in Bloemfontein, Orange River Colony. This is a strange incident as the Frigate Bird has always been considered a true pelagic species, or indeed "a native only of the very most remote ocean regions.

Ringed Birds

Much interest has ever been centred in the mysteries of migration. In an effort to obtain more information upon the subject, the novel expedient of ringing-birds has been adopted. Our esteemed friend Alwin Haagner of Pretoria, Transvaal, forwards some interesting notes.

Hungarian Stork in Natal.—The following correspondence appeared in the London Times:—

(i.) Hungarian Stork in Natal.—Mr. Peter McKenzie writes from Seaford, Himeville, District Polela, Natal, under date February 4:—"On January 30, 1909, my nephew shot a stork with his rifle. On examining it he was astonished to find a metal band round one of its legs. On this band was the following inscription:—'Ornith. Kozspont, Budapest, Hungaria, 209.' Should you find room for these few lines, I hope they may come to the notice of those who put the band on. Polela is the south-westernmost district of Natal, adjoining Basutoland."—*'Times,'* weekly edition, Mar. 5th, 1909.

(ii.) Bird Migration; to the editor of the *'Times.'*—Sir, The notice of *'The Times,'* March 3, "A Hungarian Stork in Natal," roused everywhere the greatest interest. This encourages me to ask you the favor of your publicity for the following considerations.

One of the hardest points to solve concerning the problem of bird migration was the question whether our birds going to Africa for winter-quarters, pass the Equator. The Hungarian Stork shot in Natal is a direct proof that they pass the Equator, and the ringed Stork liberated in North Germany which was killed in the Bushmen's country is a further evidence of the fact. In both cases the identity of the individual was established with full certainty;

and this invests them with the highest importance.

The geographical elements of the Hungarian Stork shot in Natal were the following:—

It was liberated on the nest, as young one, at Hidveg, in the south-easter part of Hungary (Transylvania), lying under N. lat. 45 deg., 30 min. and E. long. (Greenwich) 25 deg., 30 min., on July 8, 1908, with a ring bearing No. 209. The bird reached Polela in Natal, which lies under S. lat. 30 deg. and E. long. 30 deg. The course taken was nearly straight to the south, and passing the Equator, the length of travel in aerial line being about 8600 kilometers.

As a committee was formed recently at Pretoria for the observation of bird migration after the Hungarian model, and as our Stork penetrated very deeply into the country of our South African friends, the high significance of the case may be judged by this; and I express the hope that the migration of the Stork may soon be clearly established, chiefly if the daily press, the most modern of great powers, gives it its mighty help, as in the present case.

With the assurance of my esteem, believe me, Sir, Yours respectfully, Otto Herman, Director, Royal Hungarian central Bureau for Ornithology, Budapest, March 12.—*'Times,'* weekly ed., March 19th, 1909.

Ringling of Migratory Birds—According to the last number of *'British Birds,'* Mr. Harry Witherby has also commenced in England the Hungarian and Rositten system of ringling migratory birds. We believe Scotland will follow in the wake, so that it behoves South African ornithologists to keep a keen look-out for such birds in the future, and to notify the Secretary of the S.A.O.U. immediately any ringed bird is pro-

cured, giving all data.

Marked White Stork of Basutoland—I heard some days ago of a White Stock (*Ciconia ciconia*) having been shot in January by a native village, about 25 miles from here, with a silver ring attached to its leg. I got the chief to send it in for inspection, as he does not want to part with it, and the ring is still attached to the half-dried leg. It bears the inscription "Vogelwarte Rositten 1265 Germania." Can one find out the history of the bird, as the natives are much interested in it.—J. P. Murray, Maseru, Basutoland, South Africa.

March 16, 1909

In connection with above, B. N. is pleased to report the following circular has been sent us:—

"The winter-quarters and routes of our migrant birds are until now yet unknown, and there is only one method which leads to positive knowledge on this account: the marking of birds by aluminium rings, a method which has been tried with success in Germany and in Denmark, as a House-Stork marked in Pomerania was caught in Africa, 15 deg. S. of the Equator. The Hungarian Central Bureau for Ornithology has now also begun the marking of young Storks, Herons, Gulls, and Swallows. The aluminium ring is fastened around the leg of the bird and it bears in each case the inscription 'Budapest,' followed by a number which corresponds in the entry in the register-book of the Hungarian Central Bureau for Ornithology. Anyone catching such a marked bird, or hearing of the capture of such, is kindly requested to send the ring on to the Hungarian Central Bureau for Ornithology, Jozsef-korut 65, Budapest VIII., Hungary, accompanied by a notice stating the locality, time, and particulars of capture

THE LONDON TIMES ON

AMERICAN MUSEUMS

Those who attended the Ornithological Congress in London in 1905 had an opportunity of seeing lantern pictures of some of the "habitat groups" arranged by Mr. Frank Chapman for the American Museum of Natural History. These groups (said 'The Times,' in a review of Mr. Chapman's last book) are of a more ambitious kind than any which are to be seen at present either in our own Natural History Museum or in living form in the aviaries at the Zoological Gardens. They aim at displaying not only the birds' nesting life, but the types of country which they haunt, and they include painted backgrounds representing wide stretches of characteristic scenery, as well as exact reconstructions of the nests and their immediate surroundings, such as are to be seen in the lifelike cases at South Kensington. To judge from the illustrations here given, many of these groups are very successful in overcoming the difficulty of combining concrete and pictorial representations without disturbance of the sense of reality.

Bird Music.

On the vexed question whether England or America has the sweeter singers, the reviewers says that Mr. Chapman discreetly refuses to commit himself to a downright opinion, after spending only a few weeks in one country and a lifetime in the other. But he points out that the author's individual comparisons indicate fairly clearly that, in spite of the poets' praises of the Skylark, Thrush, and Nightingale, he considers the fields and forests of America to be the richer in song. That he was rather disappointed with the Nightingale proves, indeed, but little. Probably every Englishman who hears it for the first time feels the same.

Judged by the visions of expectancy, the first sight of Niagara is equally unimpressive. But it is clear that a life-long familiarity with the songs of American birds tends to instil a certain distaste for those qualities in bird music which to English ears seem the highest. Mr. Chapman, I may add, is not the only American naturalist who has been somewhat disappointed with British bird music. Burroughs confessed to a similar feeling.

BREEDING MULES.

There is no part of the fancy more interesting than that of raising mules or hybrids. This is a wide field and not by any means fully explored. The fancier generally accepts as "mules" a cross between some finch and a canary. Nearly all of the common finches, except perhaps the chaffinch and brambling finch, we have at some time or other crossed with a canary. The gold finch is the most frequent sire. The goldie is an obliging fellow, more especially if hand-bred. A cage-moulted bird is steadier than a unmoulted specimen. No use to expect mules, if the goldie is not in form, well over the moult and well in song. We are not prepared to admit that one variety of goldfinch whether a "white-legged" a "pea-throat," "Cheverells," "pear-tree-goldies" has any special virtues over another. A light-colored finch with plenty of white hind face and clean brilliant blaze gets our preference over the smutty, dingy specimen. The quality in the mule comes through the hen, so you want size, color and style in the canary. Better the type of canary, better the chance of a good cross. Don't forget, if you are lucky enough to possess or to obtain a hen which has the habit of breeding pied mules, don't forget to

keep her, for such a bird is invaluable and any season may present you with a light, evenly marked hybrid. Size is important in the hen; thus it is that crest-bred canaries make good stock birds for the would-be mule breeder. You will not infrequently obtain buff mules from yellow hens, but don't anticipate getting yellow mules from buff canaries. The so-called "sib" or inbred canaries undoubtedly give a pre-disposition towards "light" mules, when the color line is out-bred. If you want to breed "sib" hens, better get in touch with some established "strain" and experiment until you get what you want; even if you grow grey in the process, remember, "there are others" of like experience. If you succeeded in producing a clear, light goldfinch mule, you are to be envied. No mule is so handsome. The clear canary body, the long, snaky head, the imperial poise, the slight blaze on the face and the yellow bar on the flights and tail, make a bird worth a ransom. Next maybe classed the evenly marked specimens, the two, four and six-marked birds; i. e., the bird marked on eyes, wings and tail. All these birds, for exhibition, must be color fed.

In starting breeding, remember the Goldfinch is a late breeder, in any time from May to September. Master Goldie may a-wooing go, but when he does so he loses no time and declares his intentions right off. If you have been running the finches all winter with the canary hens, sooner or later in the season, the cocks will get "spunky." Separate them, putting one goldie to two hen canaries. If you see signs of affinity between any "couples" follow it up and give them every opportunity to make good. If you are not sure of the hen, as a mother, it is not a bad

plan to take a nest from her, with a cock canary. As soon as paired take the cock canary out of the cage, placing the finch in a separate cage within sight and hearing of the female canary. Many of the fancy say the goldfinch will never pair, until he is "clear in beak," i. e., until the pencil line on ridge of upper mandible has disappeared. This fact has sufficient coincidence with reproduction to make it worthy of observation. The best cage for goldie-mule breeding is the three division style, each division being about 12 by 14 inches, box patterns.

In caring for the eggs, follow directions as given in serial on the Canary. The finch needs close watching, better remove him just prior to the laying of each egg and remove finally when the third is laid. He will then turn his attention to the second female. Repeat the progress. There is no advantage, but considerable risk by leaving the finch during the incubation or after the chicks appear for few goldies make good parents—to hybrids. Treat the birds just as in canary-raising, noting however that young mules are very "cranky" and should be separated after they begin to moult. In attempting other varieties of mules proceed along the same lines. In almost all cases the finch must be the male, except in the case of the Bullfinch where a hen finch is always used.

Several of the smaller foreign finches will also cross, and produce very attractive specimens.

In exhibiting mules size, color, steadiness and markings with good staging are the points to be counted upon.

May a prosperous New Year be the experience of all our bird-friends.

THE GOULDIAN FINCH.

(*Poephila mirabilis*).

By Wesley T. Page, F. C. S., London.

I have used one specific name for this bird, since the Red, Black and Yellow Headed variations are certainly not species but merely varieties of the same species; however as specific distinction has been given, and there is strong probability of the Yellow-headed variety being perpetuated as a race, the present specific names (as under) may be regarded as a convenience.

Red-head, (*P. mirabilis*); Black-head, (*P. gouldiae*); Yellow-head, (*P. armitiana*);

The different varieties readily interbreed, and their progeny appears to come true, i.e. either Red-heads or Black-heads; and both varieties frequently occur in the same brood. It must be noted that Black-heads mostly procure their own kind, and the Red-heads the same; but at the same time this is not absolute, for we have a fully authenticated record that Dr. Ramsay bred all three varieties (Blacks, Reds and Yellows) from a pair of Black-heads in his Australian aviary. This experience is not an isolate one, but the Yellow-headed variety is extremely uncommon. There is nothing remarkable in imported birds of the same color producing mixed broods, for a Black-headed female in captivity will invariably choose a Red-headed mate, even though there be several vigorous well colored specimens of her own kind present; from the freedom with which this choice is made, I am of opinion that the two colors freely interbreed in a wild state.

Gouldian Finches, with their versatile colored plumage, vie in beauty with any of Australia's many hued and gorgeously apparelled birds. They are only lacking in one respect, and

that is song, for as song birds they have no song: of course they are not dumb, and to their own kind would appear to be undoubtedly fluent and fine performers, from the evident satisfaction expressed by the demeanor of the musician and his companions.

Even in the aviary their soft, sibilant and grasshopper like twittering is quite audible nevertheless they are not song birds as we regard the term.

Their wants in captivity are of the simplest; canary, white and spray millet, form their staple bill of fare, while oats and paddy rice are also eaten. Rock salt, cuttlefish, and a cube of loaf sugar, with plenty of grass in flower and other green food, should be regularly supplied. (They are better without the sugar.—Ed.) In winter and early spring I always use French lettuce as green food. Green oats (i.e. oats in the ear), are very wholesome, and are greedily eaten when in season. My birds also pick over the soft food mixture supplied to other birds.

It must be admitted that these lovely birds are a great disappointment and trial to many, new purchases dying off very quickly; losses with new deliveries of all kinds of birds I fear there always will be, as most aviculturists know to their cost; but once acclimatised and kept hygienically, Gouldians are neither delicate nor difficult to keep. They need space and must have a roomy cage, with plenty of perches (natural branches by preference). If confined in a small cage, they lack exercise, get over fat, and soon "shuffle off." At the same time they neither need hot-house treatment, nor will they shrivel up at the first frost; this I have proved experimentally. In a garden aviary with space for flight and a night shelter, they are

as "hard as nails" and care no more for the worst vagaries of a sharp winter than do our native sparrows, in fact not so much. If care is taken to procure healthy specimens, few birds are less trouble to keep in health; their delicacy is only fancied and not real. The critical period of their life being the first few weeks in this country. They should only be turned out of doors during warm, dry weather. They are an excellent aviary bird, being very cheerful during bad weather.

Unless the aviary be a large one, the best breeding results will be attained by including only one pair in it, as Gouldians are by no means kindly disposed to their own species during breeding season: at the same time they are harmless to other birds, no matter how small. In a cage two pairs would spend their times quarrelling instead of reproducing their kind. For nesting they seem to prefer a Hartz travelling cage, or else a box of the cigar type.

The readers of B. N. will probably recall the "Lady Finches" or Paradise Birds of our local bird stores; these were Gouldian Finches: amongst the most brilliant plumaged of 4 small birds. In our climate they would breed readily and should prove an interesting and profitable species for some of our aviary owners. Since the fire they are very rarely found in the stores. But a special order would probably secure breeding pairs from Australia.

Bird News

FREDERICK W. D'EVELYN, EDITOR

Owing to excess of "notes," editorials held over.

Future issues of BIRD NEWS will be bulletins published by Executive Committee.

THE CANARY.**Practical Notes on General Management and Breeding. No. 6.**

If the nest is placed in the most sheltered portion of the cage, the hen will be constantly changing her position, with the result the eggs will be turned. If the nest box is placed so as to catch the full glare of the light, the hen will only sit in one position and the eggs will not be turned.

It is not a bad practice to sprinkle the eggs every evening for the last five or six days of sitting with a little warm water. This simple treatment often secures the eggs being successfully hatched.

Clear Eggs.

"Clear eggs" are generally due to lack of tone in one or both birds; plenty of cuttlefish bone; clear grit and a trace of iron in the water is useful. The old custom of placing an iron nail in the drinking vessel—before the birds are paired—is not a bad plan. If you can place a nest of good eggs under the hen who has the clear ones, let her hatch and feed the young ones; good results often follow.

Singing Hens.

Better never put these "suffragettes" up to breed—they are almost certain to act ugly just when most "sense" is required.

Breeding.

It is best to breed from young hens—first year; males from two to three years. Run a hen in the breeding cage for say three seasons and the cock four, and you will probably have got their best "output." Cock birds act differently and when the chicks appear, be watchful of the actions of the father. If he is attentive to the hen, bringing food and not too assertive or "boring" into the nest to get at the youngsters, you

may probably leave him in the cage, otherwise better remove him. Note the actions of the hen, for she may also be a faulty parent. Experience and observation must be your guides in the emergencies of the breeding room.

In aviary breeding, a dozen hens with cocks will, with fair good luck, produce a goodly number of young birds. Of course you have constantly to be on the look out for "family feuds"—find the culprit and remove at once. It is manifestly impossible to raise exhibition birds in an aviary of mixed varieties; don't try—you will lose time, money and patience. When the young birds are hatched, give a little more egg-food than usual, (that is if you are a believer in egg food—many fanciers omit it altogether); also some soaked seeds and green food. If the hen is on the nest, let her alone. If the birds are hatched, their plaintive chirp will be evidence of the fact. Don't interfere until time renders it necessary.

If a mother refuses to feed her chicks, your troubles are not far off. Try a foster mother if you have one, if not, then think "soberly" before you undertake feeding—for it is a most wearisome pastime, and rarely worth the trouble. The chicks will need to be fed about every thirty five minutes from sunrise; four to six days old, every hour; then extend about three-fourths of an hour until tenth day, when feed every two hours. You can make a good food which we have often used, by simply grinding up some plain cracker with yolk of hard-boiled egg, moistened with warm water to the consistency of soft paste.

When the chicks reach the age of six or seven days, a little soaked German rape may be added, well ground and passed through a hair

sieve. After ten days, crushed seed maybe added. In all cases give the food at blood heat. In feeding, use a soft quill, a piece of card or other simple spoon.

A chick twenty-six days old is generally able to feed itself. But don't change the food to suddenly. Birds must be weaned as carefully as babies. You can safely keep for seven or eight weeks—the baby mixture of egg, crushed rape, bread and green food. Be very regular in time of feeding. Very careful and cleanly in its preparation. Sour food is fatal—don't permit such a condition. Don't give water before five weeks of age—bring them unto it slowly.

The Second Nest.

When the chicks are some three weeks old, the hen will show signs of wanting to nest again. Give her the same accomodation and attention as when first set. The cock will probably continue to feed the young ones, if he has already been doing so. If the cock has been removed, turn him into the cage for an hour or two daily until pairing is obtained; then withdraw him. Remove the young ones and wean bird as soon as possible.

Moulting.

The moulting season extends from July to November in each year. The younger bred birds, that is bred before August, originally moult freer and better than the later broods.

Moulting is generally considered a critical time in the bird room—but healthy stock, good care, good ventilation and common sense will at all times reduce the dangers to a minimum. The exhibitor has the added anxiety of "good feather" to trouble over—but that also is more likely to be secured by just the aforementioned qualifications.

Young Birds Moults.

Chicks generally begin to moult

between the age of eight and ten weeks. It is not uncommon to find that young birds hatched in May will often throw feathers before those that are hatched in April or end of March. The moulting bird generally becomes "dopey," often goes asleep during the day, and looks quite down and out. It seems to go about the cage hunting for something. A few days later some loose feathers lying in the cage will tell the story. Now watch the breast of the bird and in a few days two narrow stripes of new feathers will appear on each side of the breast. This is what the fanciers term "begin to break." The brighter and quicker these lines show, the better is the prospect.

Food During Moults

Feed liberally but "cut out" every thing which could possibly ferment or go sour.

In addition to ordinary seed, give inga, maw, a few crushed oats, ripe plantain and linseed. The latter (crushed linseed-meal) added to the egg and biscuit food is excellent.

A little beef suet and as the moult advances, boiled carrot thrice weekly tightens the feather and adds bloom. Great care is needed to keep all draughts away from the birds during the moult.

Never at this time change the birds from one temperature to another, keep them where they were when moulting set in—otherwise they may "stick" in the moult. Birds tardy in beginning to moult may however be stimulated, by changing into warmer quarters or by placing a thin flannel covering over the cage.

A little fluid magnesia or a pinch of epon salts added to the drinking water is very useful when moulting sets in. Some fanciers add whiskey and lemon juice. It is sometimes recommended to moult the birds in dark rooms.

Bird News



PUBLISHED BY THE

Avicultural Society of California

OFFICES: 717 MARKET ST., SAN FRANCISCO

The Avicultural Society of California

HEAD OFFICE
717 Market Street
SAN FRANCISCO, CAL.

W. W. COOLEY, Business Manager

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Bird News will conduct a purchase department, by which members may obtain birds, bird literature, or aviary furnishings

Bird News will open columns for exchanges or sales

Bird News is open for queries on bird management, disease, breeding, and all kindred topics

WANTED

WANTED—Young hen Belgian canary, suitable for breeding. A. B., office this paper.

WANTED—Cage moulted, British goldfinch male. 219 Central building, San Francisco.

WANTED—Names of all bird fanciers in California; address, with list of birds, to Business Manager Bird News, San Francisco.

EXCHANGE

EXCHANGE—Four Barbary Doves, 10 Tigrine Doves for ornamental Ducks or Geese; 3256 Briggs avenue, Alameda; E. W. Gifford.

EXCHANGE—Cont.

EXCHANGE—Male hybrid linnet, canary, for female goldfinch. Address care Business Manager, Bird News, San Francisco.

QUERIES

CANARY AILING—W. B. C., Fresno: Your bird is over fed; cut out hemp seed; staple diet: canary seed, twice a week 1-2 teaspoonful of summer rape; put as much Epsom salts as will lie upon a dime, into the drinking water for two days; feed chick weed and lettuce alternate days.

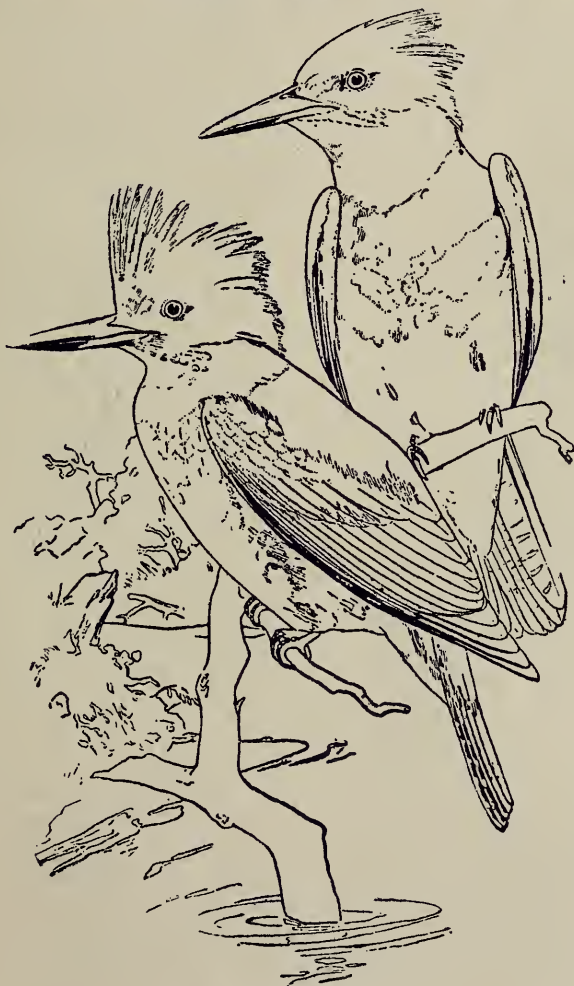
This number contains: } *Raising Wild Fowl on a Southern California Ranch*
} *Birds in the Great San Francisco Fire, April 18, 1906*

Bird News

Vol. 1—No. 2

MARCH—APRIL, 1909

15 CENTS



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...The... Avicultural Society of California

*For the Study of American and Foreign Birds in
 Freedom and Captivity*

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WANTED—Names of all bird fanciers in California. Address with list of birds, Business Manager, Bird news.

EXCHANGE

EXCHANGE—One pair Green Budge rigars for pair Yellow. E. B. M., Bird News.

QUERIES

WHAT is meant by "Sib-bred," asks Robt. S. Stockton. Sib bred is simply a fancier's term for birds bred in and in—much used in hybrid breeding.

QUERIES—Cont'd.

JAS. B. Lodi, asks: Is "Tailing" young canaries a helpful method? Just the reverse, it is both useless and injurious.

C. B. E., Berkeley—Asks: What are the symptoms and how may one get rid of red lice on a canary? The red mite is a tick, nocturnal in its habits; birds become restless at night, start, shake their feathers; peek at the body; just indicates something is biting. A white cloth around cage will attract; then may find the tiny red specks adherent. Thoroughly disinfect the cage with hot water, turpentine, Condy's Fluid, etc.; if all metal cage bake in an oven. Buchach powder on bird; wash in bath of Synol soap. Smear camphor oil or Cedar Wood oil on perches. Will give special article on Red Mites in an early number of Bird News.

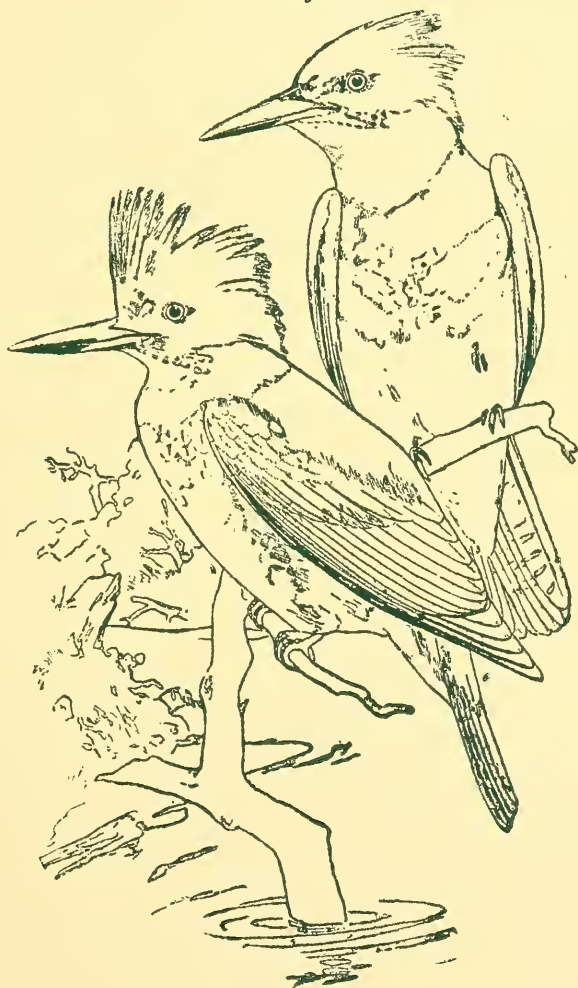
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HUMMING BIRDS AS HOUSE PETS

Bird News

Vol. 1. No. 3

MAY-JUNE

15 Cents



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WANTED

WANTED—Local breeders of Roller Canaries. Please address Office BIRD NEWS.

WANTED—Four specimens of Rainbow Finch (*Cyanospiza leucantheri*) Mexican fanciers. Please note. 314 Phelan Building, San Francisco.

WANTED—Copy of "Ornamental Waterfowl" by Hon. Rose Hubbard. Birds of Canary Islands by Harris. Office BIRD NEWS.

EXCHANGE

EXCHANGE—Aviary-bred Blue Jaws for Chaffinches. Females. Bird News.

QUERIES

I. B. M., San Francisco, asks:
 What causes a canary to go blind?

Injury to eye, cold from exposure, improper feeding resulting in cataract; in crested birds—overgrown

QUERIES—Cont'd.

crest. Blindness, if partial, causes bird to turn head sideways and hesitate to leave perch.

Geo. B. Marin.—"How can you made a caged canary take a bath?"

Remove all water from cage for some hours; then place shallow saucer in cage; set in sun and wait. Coax, by sprinkling a few drops of water over the bird. Or place cage in sun, remove seed boxes, and spray bird from an atomizer.

F. H. D., Oakland, asks:—What is difference between "Mules" and "Hybrids?" Mules—a cross between different birds, but involving canary-blood. Hybrids—any other bird cross.

Canary cock not singing. What is the reason? Inquires C. Brown, Seattle. No male sings so much when paired as he does when in a cage by himself. He will return to song, just as soon as his domestic duties are over.

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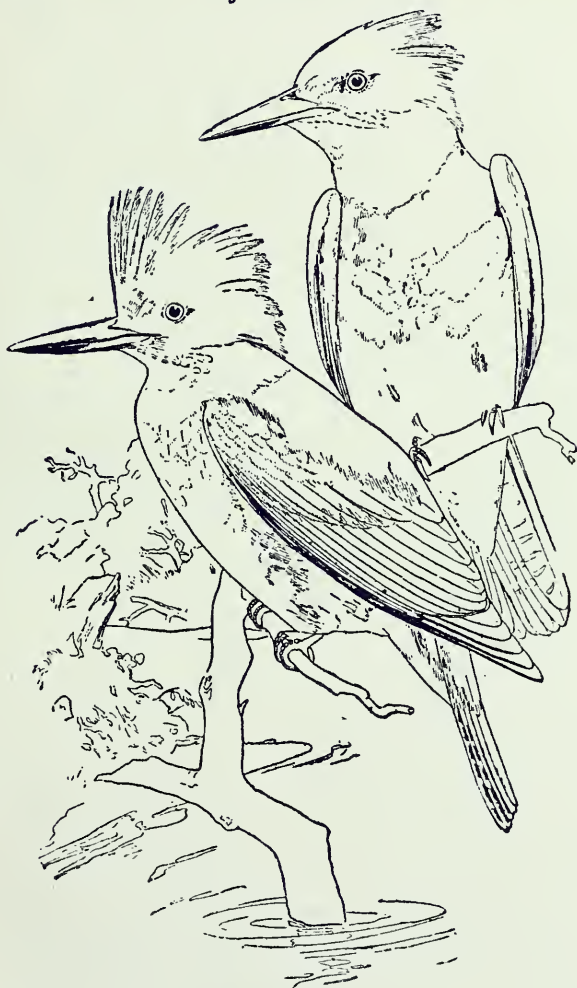
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AUDUBON SOCIETY WOULD LICENSE CATS

Bird News

Vol. 1. No. 4

JULY-AUGUST

15 Cents



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WANTED

WANTED—Local breeders of Roller Canaries. Please address Office BIRD NEWS.

WANTED—All bird fanciers in California to express their views about having a cage-bird show. Write to Bird News.

WANTED—Two pairs of California bred Budgerigars, green or yellow; state price. Office B.N.

WANTED—Copy of "Ornamental Waterfowl" by Hon. Rose Hubbard. Birds of Canary Islands by Harris. Office BIRD NEWS.

EXCHANGE

EXCHANGE—Home-bred Black-throat finches; what offers. Bird News Exchange. A 10 gallon aquarium for singing canaries; Bird News.

QUERIES

E. B., San Francisco—"Snipy-head" is a thin and narrow skull, equivalent to pinched skull—it is a bad feature as it detracts from character of show birds.

M. Clark, San Jose—Your bird died from acute inflammation of liver and bowels. Something has fouled your seed boxes.

Young Bullfinches bathing? E. M. K., Stockton—Yes, when able to pick food, place bath in sun.

Eureka, J. B. S.—The bill you refer to is now law; it demands that all collecting permits expire on 31st of December of each year. There is too much "commercial" collecting going on in the state. The law is stringent, but honest students will have every consideration.

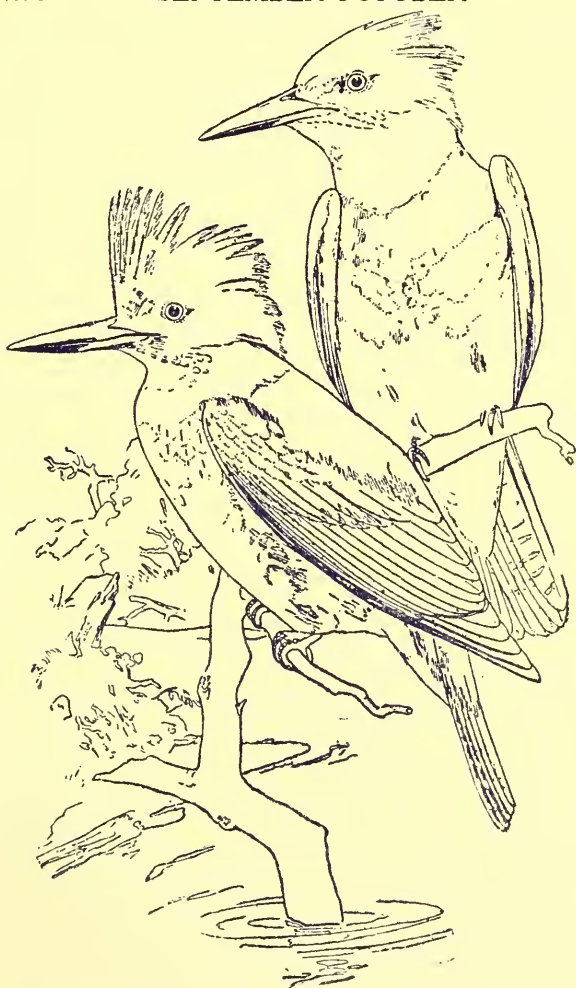
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THE ROLLER CANARY

Bird News

Vol. 1. No. 5

SEPTEMBER-OCTOBER

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WANTED

WANTED—Live specimens of "Blue Robin,"—*Sialis sialis*—for Zoological Park; office B. N.

WANTED—Breeder's Cards; state breed and prices; special terms. Business Manager.

WANTED—One pair Belgian Canaries, buff or yellow; J. B. M., care of B. N.

WANTED—A supply of mixed wild (weeds) seeds for aviary birds; Richard H., B. N.

EXCHANGE

EXCHANGE—Home-bred Black-throat finches; what offers. Bird News Exchange. A 10 gallon aquarium for singing canaries;

EXCHANGE—California Linnets for Bobolinks or Cedar Birds; Senex, B. N.

QUERIES

W. H. W., Santa Ana.—"Spratts" is an old established house very reliable.

A. Brown, Ocean View.—The seed mixture is good; add teazle seed and thistle. Maw seed twice weekly.

Kate F., San Diego.—Mealworms can be easily "raised"—get a start from your local bird store.

Donald, San Francisco.—Parrot holding up foot.—Many birds rest by holding up one foot; if bird lifts foot suddenly when feeding or climbing, possibly foot is sore; examine foot; look for "strain" or "wound." Rest and hot water for first; hot water, Friar's Balsam, or Zinc Ointment for latter.

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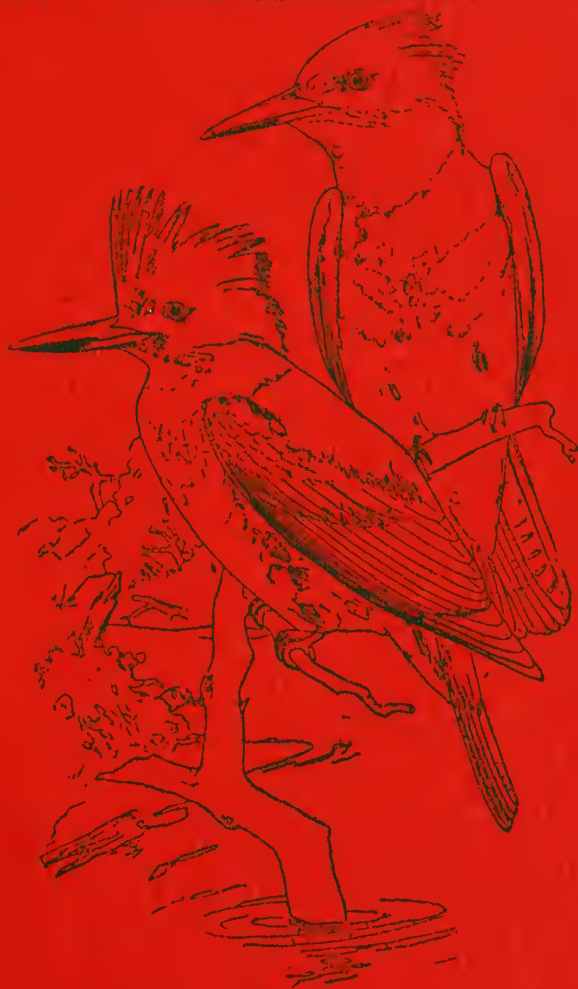
**THE MURDER OF THE INNOCENTS
BREEDING MULES**

Bird News

Vol. 1. No. 6

NOVEMBER-DECEMBER

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